Report on Advanced Practice Nursing (APN) in Canada for the Global Summit - July 28-29, 2014

Prepared by Denise Bryant-Lukosius and Canadian Centre for APN Research (CCAPNR) faculty: Nancy Carter, Faith Donald, Patti Harbman, Kelley Kilpatrick, Ruth Martin-Misener, Diana Sherifali, Joan Tranmer, and Ruta Valaitis

1. The Evolution and Current Status of APN in Canada

Canada's geography has played an important role in the development of APN. Canada is the second largest country in the world, with a land mass slightly larger than all of Europe.[1] Despite its size, Canada has a sparse population of 35 million people, living mainly in southern urban communities bordering the United States.[1,2] About 20% of Canadians live in rural communities or isolated and remote northern communities where there are fewer healthcare services and resources. The introduction of nurses and nurse midwives with expanded roles in northern and remote communities dates back to the 1890s.[3] These roles addressed healthcare needs related to the shortage of physicians and lack of medical services. Canada has over 50 years of more formal APN experience with the introduction of APN roles in the mid 1960s. APN roles now exist in all 13 Canadian provinces and territories. Two types of APN roles are recognized in Canada - the Clinical Nurse Specialist (CNS) and the Nurse Practitioner (NP).[4]

The Clinical Nurse Specialist

The CNS is a registered nurse with a master's or doctoral degree in nursing.[5] CNSs were introduced in acute care hospitals during the 1960s and 1970s, in response to rising patient acuity and the growing specialization and complexity of healthcare. Their role was to support and improve nursing practice at the point of care.[3] In 2014, a pan-Canadian initiative validated new core competencies for the CNS including: i) clinical care, ii) system leadership, iii) advancement of nursing practice, and iv) evaluation and research.[6]

The current number of CNSs is difficult to determine because there are no systematic processes in place to identify master's prepared CNSs or to monitor practice patterns. In all but two provinces (Alberta, Quebec), there is no legal protection of the CNS title, so any nurse can self-identify as a CNS. In 2011, there were 2,200 self-reported CNSs in Canada, down from 2,354 in 2007, and making up less than 1% of the nursing workforce.[7] A recent national survey suggests that these self-report numbers over-estimate the actual number of master's prepared CNSs.[8] While there have been pockets of increased CNS deployment in some provinces, overall perception is that the number of CNSs in Canada is on the decline.[9,10]

A hallmark of CNS practice is specialization in an area of practice that may be defined by type of illness (e.g., cancer), patient health need (e.g., pain relief), type of care (critical care) or patient age (e.g., neonatology).[9] Most CNSs (66%) work in hospital inpatient and outpatient settings but there has been expansion of CNS roles to community, long-term care and home care settings.[8,9] Their roles are multi-faceted and highly variable with differing levels of involvement in clinical care, education, research, organizational leadership, scholarly/professional development, and consultation depending on the needs of the patient population they serve and the organizations in which they work.[8,9] CNSs also play an important role in supporting nurses and other health providers, and in leading evidence-based practice, quality improvement and program development initiatives.[9]

The Nurse Practitioner

NPs were introduced during the mid-1960s mostly in primary care settings to address needs related to the launch of universal publicly funded healthcare, a perceived shortage of physicians, increased medical

specialization, and the expansion of primary healthcare.[3] Neonatal NPs and NPs working in acute care were introduced in the late1980s. Since 2009, a small number of NPs in Anesthesia Care have been introduced in one province (Ontario).

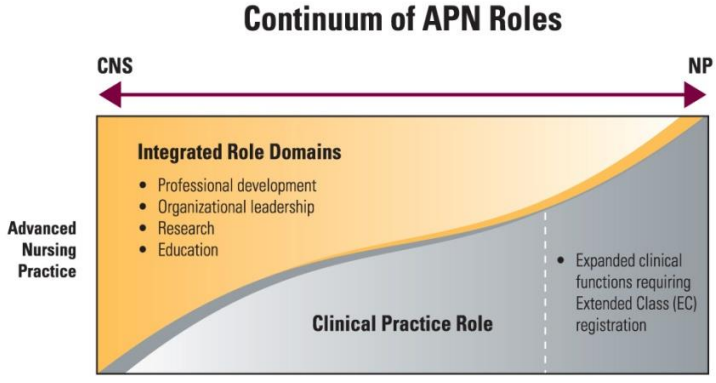
NPs are registered nurses who have completed a NP education program at the baccalaureate or master's level. For two specialized areas (neonatal and anesthesia care), NPs complete a post masters diploma. All NPs must successfully write an examination to practice as a NP-Primary Healthcare/All Ages, NP-Adult, or NP-Pediatric.[11] They have an expanded legislated scope of practice that enables them to autonomously diagnose, order/interpret diagnostic tests, prescribe pharmaceuticals, and perform procedures. In three provinces (Alberta, British Columbia, Ontario), NPs can admit and discharge patients from hospital.

The expansion of NP roles has been the highlight of APN development in Canada. Between 2005 and 2012, the total number of NPs quadrupled from 825 to 3,286.[12,13] However, NPs still only make up about 1% of the Canadian nursing workforce. NPs in primary care are the largest group of NPs. They work in community and primary care settings and are responsible for health promotion, injury/disease prevention, the diagnosis and management of acute minor illnesses, and chronic disease management.[14] NPs in primary care are the backbone of rural and remote healthcare in Canada and provide leadership in the care of vulnerable patient populations.[15] NPs focused on adult, pediatric or anesthesia care work in hospital inpatient or outpatient units.[16] They provide acute, critical and chronic disease management care for patients with complex and multiple co-morbid health conditions. More than 50% of all NPs work outside the hospital sector with increasing deployment beyond primary care to homecare and long-term care.[13]

Overlapping and Distinguishing Features of CNS and NP Roles

Figure 1 illustrates overlapping and distinguishing features of CNS and NP roles in Canada. Clinical practice is a defining feature of both roles. It is the integration of clinical practice with education, research, organizational leadership and professional development responsibilities that make the roles advanced. How CNSs and NPs operationalize these role dimensions varies. On average, clinical practice makes up the largest proportion of CNS work time (22%), but compared to NPs they have greater involvement in all role dimensions, each making up 7% to 21% of work time.[8] NPs tend to have greater involvement in clinical care, often accounting for 94% of their work time.[13,17] NPs also have an expanded scope of clinical practice, while CNSs have the same scope of practice as a registered nurse. As the wavy line indicates, CNS and NP role enactment is highly variable in response to population health and practice setting needs. This fluidity makes CNSs and NPs assets for addressing dynamic healthcare system needs.

Figure 1 - CNS and NP Roles



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

Factors Enabling APN Role Development and Implementation

Important enablers of role development and implementation were identified from the most comprehensive study to date of CNS and NP roles in Canada.[15] Enablers involve targeted strategies at different levels of the healthcare system - federal (F), provincial (P), territorial (T), and organizational (O), including pan-Canadian approaches, education, legislation and regulation, and role planning.

Pan-Canadian enablers targeted F, P, and T levels. One example was the development of a national framework outlining competencies for advanced nursing practice, led by the Canadian Nurses Association.[4] This framework provides a common language to define advanced practice and enhance role clarity among stakeholders. The Canadian Nurse Practitioner Initiative was an $8.9 million dollar, 18 month initiative that led to the development of recruitment strategies, national education standards, interprofessional health human resource planning guides, and national competency and regulatory frameworks.[18] A ten year, nationally funded Research Chair in APN, provided research, education, mentorship, and knowledge translation resources and tools to increase the number of APN researchers across the country and to promote the conduct and uptake of APN research.[19] Recent pan-Canadian efforts have focused on strengthening and clarifying the role of the CNS,[6,10] establishing a national framework and principles for NP education,[20] and a NP public awareness campaign.[21]

At the F, P, and T levels, standardized education policies and curricula are essential for CNS and NP role development. The International Council of Nurses' recommendation that APNs should be prepared at the graduate level, provided political clout to expand, reinforce and/or sustain graduate education programs.[22] Increased standardization of NP education has occurred with 10 out of 13 provinces requiring a master's degree. Programs offering a good fit between the curriculum and the specific nature of APN practices better prepare novice CNSs and NPs for their roles.[23]

The development of legislative and regulatory mechanisms at F, P, and T levels to support expanded and autonomous NP practice has been substantive. Some barriers still exist and these vary across provinces and territories, but progress has been made related to prescribing practices, specialist referrals, admission and discharge privileges, practice agreements, and reduced reliance on medical directives.[24]

At the F,P, T, and O levels systematic approaches to role introduction enable the successful implementation and long-term sustainability of APN roles.[24] A recommended approach is the PEPPA framework (**P**articipatory, **E**vidence-based, **P**atient-Focused **P**rocess for **A**PN role development, implementation and evaluation).[25] Along with its companion tools,[19,26] this step-wise framework provides a guide for designing and evaluating innovative models of care and well-defined APN roles. Stakeholder engagement strategies are used to promote team function and CNS and NP role acceptance and support. The framework helps to identify APN role goals and outcomes, develop an evaluation plan to assess and monitor role impact, and generate solutions to address initial and ongoing barriers to role implementation.

Actual or perceived shortages of physicians in acute and primary care at F, P, and T levels have been frequent drivers for NP role implementation.[24] At all levels (F,P,T,O), addressing physician concerns about NP liability coverage and the use of alternative physician funding arrangements (beyond fee-for-service) facilitate optimal implementation of NP scope of practice.[24] At the organizational level, needs related to evidence-based practice and quality of care, and healthcare administrator understanding and support are frequently reported enablers of CNS role implementation.[9,27] For both CNS and NP roles, government (F, P, T) funding envelopes have supported role implementation through pilot initiatives (e.g., NPs-anesthesia care) or targeted deployment to address the unmet health and healthcare services needs of specific patient populations (e.g., NPs in primary care, palliative care and long-term care; CNS roles for First Nations and Inuit Health).

2. Challenges and Opportunities for APN Education, Regulation, Payment and Practice

Education

The delivery of APN education in Canada is challenged by its geographic size and the diversity of population size, health needs, economics and health policies among 13 provinces and territories. A main issue affecting CNSs and NPs in acute care, is the lack of specialty education.[23] Shortages of faculty with expertise and the costs associated with delivering highly specialized education programs for small numbers of students have prohibited the development of specialty APN programs in most jurisdictions. Specialty programs that do exist (e.g., Neonatal NP Program) are vulnerable to closure. Collaboration across jurisdictions and Schools of Nursing, along with creative, cost-efficient, and distance learning modalities are required to improve access to specialty APN education. Limited access to education programs specifically designed to produce CNS graduates is a serious barrier to the long-term evolution and sustainability of the role. NPs in acute care and CNSs are expected to have graduate education, but this is not the case for primary care NPs in all jurisdictions. Standardization of primary care NP education is needed to achieve consistency in practice and to optimize implementation of all dimensions of advanced practice.[24] Finally, there is a need for interprofessional education to improve collaboration and the integration of CNS and NP roles within healthcare teams.[23]

Regulation

Lack of CNS title protection makes it difficult to identify and monitor CNS practice patterns and more importantly to ensure that registered nurses working in CNS positions have the knowledge and expertise to safely and effectively perform their roles.[8,9] Obtaining CNS title protection is not likely to occur because CNSs have the same scope of practice as registered nurses. A national CNS competency framework and credentialing mechanisms are required to strengthen role recognition and to ensure that those in the role have the necessary education and experience.[9,10,28] Continued work to minimize regulatory and legislative barriers to NP scope of practice across all jurisdictions is needed. The most common barriers involve prescribing restrictions, lack of hospital admission and discharge privileges, and limits on patient referral to specialists.[24] Recent federal legislation permits NPs to prescribe controlled drugs and substances, but provincial policies to support this change in practice are not yet in place. The uptake of new provincial regulatory and legislative policies supporting NP scope of practice are also often delayed at the organizational level. Further standardization of regulations (e.g., education) in some jurisdictions is also required to facilitate NP mobility across all provinces and territories.

Payment

Funding for CNS and NP roles in acute care usually comes from the general operating budgets of healthcare agencies. Shrinking budgets and lack of specific funding for these roles limits opportunity to introduce new roles and innovative care delivery models.[24] Existing roles are also vulnerable to cutbacks during economic down turns, especially in acute care where government funding is shifting from hospitals to community-based and primary care services. In some provinces/territories, new and ongoing funding specifically for NPs in health regions and agencies, has supported the expansion and retention of NPs roles. There is high variability in NP remuneration between primary care and acute care sectors and also between provinces and territories.[24,29] Lack of standardized wages is a barrier to NP recruitment and retention in areas of need and limits NP mobility across jurisdictions. Inadequate physician compensation to consult and collaborate with NPs and fee-for-service physician funding models are noted barriers to full healthcare system integration of NP roles.[24]

Practice

Lack of role clarity and lack of stakeholder understanding of CNS and NP roles are consistently reported as significant barriers to role implementation.[17, 24.] This is especially relevant to the CNS role, which may be at risk in terms of long-term sustainability.[9, 10, 28] Other threats to the role include the invisibility of CNS work, the absence of national CNS leadership, low profile, and lack of champions at key policy and decision-making tables within governments and organizations.[9,10] Declining numbers and difficulties in recruiting and retaining CNSs in clinical practice,[8, 9,30] suggest the role may be in jeopardy without significant pan-Canadian action. Lack of research about the outcomes of CNS and NP roles and how to best utilize these roles within the context of the Canadian healthcare system is another barrier to role integration.[15] Inadequate health system databases and tools to track and measure relevant outcomes and to assess factors that may influence these outcomes (e.g., activity and workload) are major challenges to conducting meaningful evaluations of CNS and NP roles.

Opportunities

Opportunities exist for enhanced integration of CNS and NP roles within the Canadian healthcare system. CNSs and NPs in Canada each make up less than 1% of the nursing workforce. In contrast, the United States has similar years of APN experience, but greater role integration with CNSs and NPs making up 2.5% and 6.5% of the nursing workforce respectively.[31] The growing and unprecedented demand for health care associated with an increasing and aging Canadian population will be the impetus for greater use of CNS and NP roles. A national expert commission identified nine recommendations for improving healthcare in Canada.[32] Five of these recommendations depend on the optimization and expansion of nursing roles and scope of practice. Major factors that will drive the need to improve CNS and NP integration within the healthcare system include: heightened attention to health promotion and chronic disease prevention, managing chronic conditions, further development of community-based primary healthcare services, care of the elderly, palliative care, and care of vulnerable populations (e.g., Aboriginal communities, at risk youth, homeless, and immigrants). Emerging government "pay-for-performance" healthcare funding models emphasizing access to team-based care, health outcomes, quality of care and evidence-based practice may also provide new opportunities for CNS and NP roles.

3. APN-Led Best Practices and Partnerships

An important innovation in one province (Ontario) was the introduction of NP-led Family Health Teams (FHTs) in primary care. FHTs provide comprehensive, patient-focused, team-based multi-disciplinary primary care services funded by the provincial government. Initially, only physicians could apply for funding to lead and manage a FHT. In one northern community, with over 30,000 patients without a primary care provider, there was physician resistance to establishing a FHT. In 2006, NPs frustrated by the lack of primary care services and the under-employment of NPs in the region, lobbied the government to submit a proposal to lead a FHT.[33] Successfully funded, this FHT is now one of 25 NP-Led FHTs established in previously underserved communities across the province. An evaluation of the first NP-Led FHT, demonstrated high patient satisfaction, improved access to care, better management of chronic conditions and health improvements through life style counseling.[34]

Another innovation was the 2005 introduction of new CNS roles by Health Canada, to address unmet health needs and improve the quality of nursing care for First Nations and Inuit communities across the country in three main areas: mental health, maternal/child health, and chronic illness. These roles are designed to improve the recruitment and retention of nursing staff in First Nation communities and to support nursing practice at the point of care through education, professional development, standardization of care and communication.[35]

When healthcare administrators and organizations have a good understanding of the complementary and distinct contributions of CNS and NP roles and how they can work together to improve care delivery, and when CNSs and NPs are clear and confident about their roles, synergistic partnerships between CNSs and NPs are developed and positive outcomes are achieved. Some examples include CNS and NP collaboration in cardiac care,[36,37] critical care,[38] and neonatal intensive care.[39] Outcomes arising from CNS and NP collaborations have included: high patient satisfaction; CNS and NP job satisfaction; development of innovative patient care devices, nursing practices, and care delivery models; and reduction in adverse events.

The Canadian Association of Advanced Practice Nurses (CAAPN), provides leadership to address policy, practice, and education issues affecting CNS and NP roles at the national level. Provincial NP and CNS associations also exist, but NPs are more organized in this regard. NPs have experienced some success in working with medical associations and government policy makers to tackle healthcare system issues and barriers to NP practice. This has been particularly true for NPs in primary care, where the impact of their roles directly aligns with provincial government priorities for primary healthcare transformation across the country. CNSs have been less successful in establishing influential relationships with government policy makers and healthcare administrators and articulating how their roles can address pressing healthcare priorities.[9] Greater leadership on the part of CNSs to make the case for optimal use of their roles in the healthcare system is required.

The Canadian Centre for APN Research (CCAPNR) was established in 2011 to carry on the work of the CHSRF/CIHR Chair in APN held by Alba DiCenso at McMaster University. CCAPNR faculty have almost 15 years of experience in using integrated knowledge translation practices to collaborate and partner with healthcare administrators and policy makers at every stage of the research process and to promote the dissemination and uptake of study results. Examples of innovative strategies include: involvement of decision-makers as active members of the research team, embedding APN graduate student research and policy practica in decision-maker settings, and organizing and leading national forums and deliberative dialogues with key stakeholders.[13, 40,41] Knowledge translation products, developed in collaboration with and often supported by key decision-makers, include research and policy briefing notes, role implementation and data collection toolkits, and an APN literature database.

References

1. Wikipedia. (2014). *Geography of Canada*. Retrieved 01/06/2014 from http://en.wikipedia.org/wiki/Geography_of_Canada

2. Employment and Social Development in Canada. (ESDC). (2014). *Canadians in Context. Geographic Distribution*. ESDC: Ottawa. Retrieved 01/06/2014 from http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=34

3. Kaasalainen, S., Martin-Misener, R., Kilpatrick, K., Harbman, P., Bryant-Lukosius, D., Donald, F., Carter, N., & DiCenso, A. (2010). A historical overview of the development of advanced practice nursing roles in Canada. *Canadian Journal of Nursing Leadership*, 23(special issue), 35-60.

4. Canadian Nurses Association (CNA). (2008). *Advanced Nursing Practice: A National Framework*. Ottawa: CNA. Retrieved 01/06/2014 from http://www.cnaaiic.ca/~/media/cna/page%20content/pdf%20en/anp_national_framework_e.pdf

5. Canadian Nurses Association (CNA). (2009). *The Clinical Nurse Specialist: Position Statement.* Ottawa: CNA. Retrieved 07/06/2014 from http://www.cnaaiic.ca/~/media/cna/page%20content/pdf%20en/ps104_clinical_nurse_specialist_e.pdf

6. Canadian Nurses Association (CNA). (2014). *Pan-Canadian Core Competency Profile for Clinical Nurse Specialists.* Ottawa: CNA.

7. Canadian Nurses Association (CNA). (2013). *2011 Workforce Profile of Registered Nurses in Canada.* Ottawa: CNA. Retrieved 07/07/2014 from http://www.cnaaiic.ca/~/media/cna/files/en/2011_rn_work_profiles_e.pdf

8. Kilpatrick, K., DiCenso, A., Bryant-Lukosius, D., Ritchie, J.A., Martin-Misener, R., & Carter, N. (2013). Practice patterns and perceived impact of clinical nurse specialist roles in Canada: Results of a national survey. *International Journal of Nursing Studies*, 50, 1524–1536. http://dx.doi.org/10.1016/j.ijnurstu.2013.03.005

9. Bryant-Lukosius, D., Carter, N., Kilpatrick, K., Martin-Misener, R., et al. (2010). The clinical nurse specialist role in Canada. *Canadian Journal of Nursing Leadership,* 23(Special Issue), 140–166.

10. Canadian Nurses Association (CNA). (2012). *Strengthening the Role of the Clinical Nurse Specialist in Canada. Background Paper*. Ottawa: CNA. Retrieved 01/06/2014 from http://www.cnaaiic.ca/~/media/cna/page%20content/pdf%20fr/strengthening_the_cns_role_background_paper_e.pdf

11. Canadian Nurses Association (CNA). (2009). *The Nurse Practitioner: Position Statement.* Ottawa: CNA. Retrieved 07/06/2014 from http://www.cnaaiic.ca/~/media/cna/page%20content/pdf%20en/ps_nurse_practitioner_e.pdf

12. Canadian Nurses Association (CNA). (2011). *2009 Workforce Profile of Registered Nurses in Canada.* Ottawa: CNA. Retrieved 07/07/2014 from http://www.cnaaiic.ca/~/media/cna/page%20content/pdf%20en/2009_rn_snapshot_e.pdf

13. Canadian Institutes of Health Information (CIHI). (2013). *Regulated Nurses. 2012 Summary Report*: Ottawa: CIHI.

14. Donald F., Bryant-Lukosius D., Martin-Misener R., Kaasalainen S., Kilpatrick K., Carter N., Harbman P., Bourgeault I., & DiCenso A. (2010). Clinical nurse specialists and nurse practitioners: Title confusion and lack of role clarity. *Canadian Journal of Nursing Leadership* 23(Special Issue), 189-210.

15. DiCenso, A., & Bryant-Lukosius, D. (2010). *Clinical Nurse Specialists and Nurse Practitioners in Canada: A Decision Support synthesis.* Ottawa, ON: Canadian Foundation for Healthcare Innovation. Retrieved 01/06/2014 from http://www.cfhi-fcass.ca/sf-docs/default-source/commissioned-research-reports/Dicenso_EN_Final.pdf?sfvrsn=0

16. Kilpatrick, K., Harbman, P., Carter, N., Martin-Misener, R., Bryant-Lukosius, D., Donald, F., Kaasalainen, S., Kioke, S., Bourgeault, I., & DiCenso, A. (2010). The acute care nurse practitioner role in Canada. *Canadian Journal of Nursing Leadership*, 23(Special Issue), 114-139.

17. Donald, F., Bryant-Lukosius, D., Kaasalainen, S., Martin-Misener, R., Kilpatrick, K., et al. (2010). Clinical nurse specialists and nurse practitioners: Title confusion and lack of role clarity. *Canadian Journal of Nursing Leadership*, 23(Special Issue), 189-210.

18. Canadian Nurse Practitioner Initiative. (2006). *Nurse Practitioners: The Time is Now. A Solution to Improving Access and Reducing Wait Times in Canada*. Retrieved 07/06/2014 fromhttp://www.npnow.ca/docs/tech-report/section1/01_Integrated_Report.pdf

19. Bryant-Lukosius, D., Vohra, J., & DiCenso, A. (2013). Resources to facilitate APN outcome research. Chapter in R. Kleinpell (ed.). *Outcome Assessment in Advanced Practice Nursing, (3rd ed).* New York: Springer Publishing Company.

20. Canadian Association of Schools of Nursing (CASN). (2012). *Nurse Practitioner Education in Canada. National Framework of Guiding Principles and Essential Components.* Ottawa: CASN. Retrieved 01/06/07 from http://www.casn.ca/vm/newvisual/attachments/856/Media/FINALNPFrameworkEN20130131.pdf

21. Canadian Nurses Association (CNA). (2013). *Nurse Practitioners. Its About Time!* Retrieved 08/06/2014 from http://www.npnow.ca/

22. International Council of Nurses. 2008. *The Scope of Practice, Standards and Competencies of the Advanced Practice Nurse*. Geneva: International Council of Nurses.

23. Martin-Misener, R., Bryant-Lukosius, D., Harbman, P., Donald, F., Kaasalainen, S., Carter, N., & DiCenso, A. (2010). Education of advanced practice nurses in Canada. *Canadian Journal of Nursing Leadership*, 23(Special Issue), 61-87.

24. DiCenso, A., Bryant-Lukosius, D Martin-Misener, R., Donald, F., Carter, N., Bourgeault, I., Abelson, J., Kilpatrick, K., Kaasalainen, S., Harbman, P., & Kioke, S. (2010). Factors enabling advanced practice nursing role integration. *Canadian Journal of Nursing Leadership*, 23(Special Issue), 211-238.

25. 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.

26. Bryant-Lukosius, D. (2009). *Designing Innovative Cancer Services and Advanced Practice Nursing Roles: Toolkit*. Toronto: Cancer Care Ontario. Retrieved 01/06/2014 fromhttps://www.cancercare.on.ca/about/programs/otherinitiatives/peppaproject/

27. Carter, N., Martin-Misener, R., Kilpatrick, K., Kaasalainen, S., Donald, F., Bryant-Lukosius, D., et al. (2010). The role of nursing leadership in integrating clinical nurse specialists and nurse practitioners in healthcare delivery in Canada. *Canadian Journal of Nursing Leadership*, 23(Special Issue), 167-188

28. Canadian Nurses Association (CNA). (2013). *Strengthening the Role of the Clinical Nurse Specialist in Canada*. *Pan-Canadian Roundtable Summary Report*. Ottawa: CNA. Retrieved 01/06/2014 from http://www.cnaaiic.ca/~/media/cna/page%20content/pdf%20fr/clinical_nurse_specialist_role_roundtable_summary_e.pdf

29. Martin-Misener, R., Kilpatrick, K., Bryant-Lukosius, D., Carter, N., Harbman, P., Miller, P., Charbonneau-Smith, R., Valaitis, R., Donald, F., McKinley, J., Boesveld, S., Lamb, A., & DiCenso, A. (2013). *Benchmarking for Nurse Practitioner Caseload and Comparative Analysis of Nurse Practitioner Pay Scales: Final Report*. Submitted to Health Care Programs & Policy Directorate, Health Canada.

30. Doran, D., Duffield, C., Rizk, P., Nahm, S., & Chu, C. (2014). A descriptive study of employment patterns and work environment outcomes of specialist nurses in Canada. *Clinical Nurse Specialist*, March/April, 105-114.

31. Delamaire, M., & Lafortune, G. (2010). *Nurses in Advanced Roles: A description and evaluation of Experiences in 12 Developed Countries*. Organization for Economic Cooperation and Development (OECD) Health Working Paper No. 54. Paris: OECD. Retrieved 15/05/2014 from www.oecd.org/els

32. National Expert Commission. (2012). *A Nursing Call to Action. The Health of our Nation, the Future of our Health System.* Ottawa: Canadian Nurses Association. Retrieved 06/06/2014 from http://www.cna-aiic.ca/~/media/cna/files/en/nec_report_e.pdf

33. Canadian Nurses Association (CNA). (2010). NP-led clinics. Ontario leads the way. *Canadian Nurse*, 106(9), 30-32.

34. Heale, R., & Pilon, R. (2012). An exploration of patient satisfaction in a nurse practitioner-led clinic. *Canadian Journal of Nursing Leadership*, 25(3), 43-55.

35. Veldhorst, A.J. (2006). Practice patterns of Clinical Nurse Specialists working with First Nations and Inuit communities. Master's thesis. Hamilton: McMaster University.

36. Griffiths, H. (2006). Advanced nursing practice: Enter the nurse practitioner. *Nursing BC*, 38, 12-17.

37. McNamara, S., Lepage, K., & Boileau, J. (2010). Interprofessional collaboration between nurse practitioner and clinical nurse specialist. *Clinical Nurse Specialist*, Jan/Feb, 33-40.

38. Tanguay, T., & MacDonald, G. (2014). *Clinical Nurse Specialist and Nurse Practitioner Partnership*. Presentation to the APN Leadership Conference. Edmonton.

39. Chinnery, H., & Follett, T. (2014). *The Neonatal Trigger Tool Experience*. Presentation at the APN Leadership Conference. Edmonton.

40. Lavis, J.N. (2011). *Dialogue Summary: Addressing the Integration of Clinical Nurse Specialists and Nurse Practitioners in Acute Healthcares Settings in Canada*. McMaster Health Forum. Retrieved 06/06/2014 from http://www.mcmasterhealthforum.org/images/docs/integrating%20clinical%20nurse%20specialists%20and%20nurse%20practitioners_issue-brief.pdf

41. Lavis, J.N. (2011). *Dialogue Summary: Addressing the Integration of Nurse Practitioners in Primary Healthcare Settings in Canada.* Hamilton, Canada: McMaster Health Forum. Retrieved 06/06/2014 from http://www.mcmasterhealth forum.org/docs/default-source/Product-Documents/stakeholder-dialogue-summary/nurse-practitioners-in-primary-healthcare-in-canada-sds.pdf?sfvrsn=2