



Advancing Family Practice Nursing in Canada: An Environmental Scan of International Literature and National Efforts towards Competency Development

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Abstract

Family practice nurses (also known as primary care nurses) are registered nurses who practice in primary healthcare and function as generalists who provide a broad range of health services, including preventative screening, health education, chronic disease management, care coordination, and system navigation. This paper reports on the current state of family practice nursing in Canada and findings from an environmental scan of literature focused on family practice nursing competency development internationally. Overall, there is a lack of clear information regarding the deployment of family practice nurses in Canada and a lack of clarity about their role in primary healthcare teams. Although family practice nurses play a key role within interprofessional primary healthcare teams, the degree to which family practice nurses have been integrated into primary healthcare varies substantially across provinces/territories. Our environmental scan indicates that the development of family practice nursing competencies is occurring internationally. The steps being taken to develop a defined set of national Canadian family practice nursing competencies are described and implications for policy, administration, leadership, education and patients are discussed.

Background

Improving access to high-quality primary healthcare in Canada is a priority. Challenges to address this priority are multi-faceted, including the increasing prevalence of chronic diseases and patients with complex health needs, high physician turnover in rural communities, and the predominance of solo-physician practices in primary healthcare (Audas et al. 2009; Broemeling et al. 2008; Fleming and Mathews 2012; Fortin et al. 2005; Government of Newfoundland and Labrador 2011; de Jonge et al. 2006; Mathews et al. 2008). Despite ongoing investments in primary healthcare, Canada continues to rank behind other countries in terms of quality, access, and cost of care (Davis et al. 2014). In Canada, Registered Nurses (RNs) who practice within primary healthcare are known as “primary care nurses” or “family practice nurses” (hereon referred to as family practice nurses). These terms are used interchangeably across Canada, and there are variations across provinces/territories and professional associations with respect to which term has been adopted. The title “family practice nurse” aligns with the national organization that represents this group of nursing, namely, the Canadian Family Practice Nurses Association (CFPNA). A competent family practice nursing workforce, providing care in collaboration with other primary healthcare providers, including family physicians and nurse practitioners, represents a feasible and affordable solution to address issues related to quality, access, and cost of care. To date, team-based models of primary healthcare that incorporate family practice nurses are present in varying degrees across provinces/territories. Although evidence suggests that family practice nurses are assuming important roles in chronic disease care and achieving quality outcomes within primary healthcare teams (Amami et al. 2017; Griffiths et al. 2010; 2011; Keleher et al. 2009; Loveman et al. 2003; Lukewich 2015; Lukewich et al. 2016; Norful et al. 2017; Poitras et al. 2017), there is a lack of clarity regarding the optimal role of family practice nurses, implementation of family practice nurses is not standardized, and there is no formalized education for family practice nursing at an undergraduate level. As a result, family practice nurses are working in primary healthcare settings with unclear job descriptions and a lack of clearly defined role expectations resulting in underutilization and missed opportunities to contribute to high-quality patient care (Martin-Misener et al. 2014).

Competency-based approaches are commonly used in nursing and other healthcare disciplines to define expectations in education and practice. Family practice nursing falls under the umbrella of “community health nursing” which also includes home care nursing and public health nursing. In the broader field of community health nursing, national competencies have been developed for RNs working in public health and home care (Community Health Nurses of Canada 2015; Community Health Nurses of Canada 2010). However, despite recommendations for the development of competencies for the family practice nurse role (Martin-Misener et al. 2014; Registered Nurses’ Association of Ontario 2012),

this has not occurred at a national level. The purpose of this paper is two-fold: (1) to provide an overview of the current state of family practice nursing in Canada including a description and definition of the family practice nursing role and examples of how the role is being deployed in primary healthcare, and (2) to report on findings of an environmental scan conducted to identify and synthesize literature related to family practice nursing competencies internationally. This is a background paper that lays the foundation for the development of a defined set of national family practice nursing competencies to further enhance the integration and optimization of family practice nurses within primary healthcare.

Defining Family Practice Nursing in Canada

Family practice nurses work in partnership with other healthcare providers who are part of the primary healthcare team, including family physicians, nurse practitioners, pharmacists, dietitians, and social workers. Family practice nurses function as generalists who provide a broad range of health services to diverse populations. Vital roles of the family practice nurse include preventative screening, health education, smoking cessation support, chronic disease management, self-management support, pediatric and women's health, pharmaceutical management, case management, care coordination, therapeutic interventions (e.g., wound care, vaccinations), and system navigation. Family practice nurses are also able to deliver nurse-led interventions/programs targeted at specific patient populations (Canadian Nurses Association 2011; Norful et al. 2017; Poitras et al. 2017; Valaitis et al. 2017). Across many jurisdictions in Canada, family practice nurses form the core of interprofessional primary healthcare teams (Ardal et al. 2007; Canadian Nurses Association 2013).

Deployment of Family Practice Nurses in Canada

Overall, there is a lack of clear information regarding the number of family practice nurses currently working in Canada, as well as the optimal number and roles of family practice nurses required to meet growing patient needs within primary healthcare. Using data from nursing regulators, the Canadian Institute for Health Information (CIHI) reports annually on the nursing workforce. The family practice nursing role is not a distinct category within this dataset; it is included within the umbrella category of community health nursing which also encompasses RNs working in various community health settings such as community health centers, home care agencies, nursing stations, public health department/units, and physician's office/family practice units (Canadian Institute for Health Information 2016). Another limitation of the CIHI data is that nurse practitioner and RN data are combined making it even more difficult to track workforce patterns. In 2016, CIHI registered nursing workforce data reported that there were 44,609 RNs working in the community health setting, as defined above. The nursing

workforce employed in a community health setting grew by 11,563 nurses from 2007 to 2016. This reflects the largest increase in average annual growth rates compared to regulated nurses working in hospital, home, and long-term care settings (Canadian Institute for Health Information 2016).

Models of Primary Healthcare Incorporating Family Practice Nurses

Across Canada, there is substantial variability between provinces/territories with respect to the presence of family practice nurses within primary healthcare teams. Although family practice nursing offers a feasible and affordable strategy to improve access, quality, and cost of primary healthcare services, some provinces are more advanced in the implementation of this important role than others. For instance, Ontario has implemented various team-based models of care that include family practice nurses to improve access to healthcare services. Community Health Centres (CHCs), first introduced in 1979, focus on delivering a broad range of primary healthcare services to specific vulnerable and marginalized populations within a given community. These populations often experience barriers to accessing healthcare services based on race, gender, language, physical disabilities, poverty, or geography. CHCs deliver care using an interprofessional team that includes a wide range of providers, such as physicians, nurse practitioners, RNs, health promoters, community health workers, dietitians, social workers, and dental staff. Family Health Teams (FHTs), introduced in 2005, deliver care using an interprofessional team structure that includes physicians, nurse practitioners, RNs, and other healthcare professionals. Nurse Practitioner-Led Clinics (NPLCs) are a more recent model of care. NPLCs are NP-led non-profit organizations that deliver comprehensive primary healthcare, including disease prevention, health promotion, and the diagnosis and treatment of episodic illnesses and chronic diseases. NPLCs use an interprofessional team approach that includes family practice nurses. Similarly, Quebec has created Family Medicine Groups and Alberta has established Primary Care Networks; both include RNs as well as other healthcare providers (Groupe de soutien à l'implantation des groupes de médecine de famille 2003; Hutchison et al. 2011). Nova Scotia began the formal integration of family practice nurses into primary healthcare through the "Family Practice Nursing Program" about a decade ago and now has about 35 collaborative care teams that include family practice nurses established across the province (Nova Scotia Health Authority 2017). In Newfoundland and Labrador, the role of a family practice nurse has yet to be formally adopted and realized across the province with very few RNs employed in primary care practices.

The Canadian Family Practice Nurses Association

The national organization that represents family practice nurses in Canada is the CFPNA. CFPNA was established in 2008 and strives to "provide a national voice for nurses in primary care through leadership, mentorship and fostering

experience.” It focuses on advocating and providing educational and networking opportunities to support family practice nurses, such as a biennial conference (Canadian Family Practice Nurses Association 2017). In addition to the national association, there are provincial organizations including the Alberta Primary Care Nurses Association, Manitoba Primary Care Nurses Association, Primary Care Nurses of Ontario, and Family Practice Nurses Association of Nova Scotia. Like the CFPNA, these associations focus on promoting and advocating for family practice nurses at a jurisdictional level (Canadian Family Practice Nurses Association 2017; Family Practice Nurses Association of Nova Scotia n.d.; Manitoba Primary Care Nurses Association n.d.; Primary Care Nurses of Ontario, 2017).

Family Practice Nursing Workforce Preparation

Family practice nurses are RNs who have obtained a college diploma or university degree. Newly educated RNs are now required to complete a university degree. RNs can care for patients with complex health needs in unpredictable situations and have a wider scope of practice than licensed/registered practical nurses (Canadian Nurses Association 2015). Education for family practice nursing is not formalized. It is a role that to date has not been included to any great extent in the curricula of entry-level undergraduate baccalaureate nursing education programs. Family practice nursing might be addressed within community health nursing courses in an unstructured manner, without adequate attention. Although additional educational requirements are not a regulated mandatory requirement for RNs to practice within primary healthcare, educational programs have been developed to prepare RNs for the family practice nursing role in primary healthcare. Ontario and Nova Scotia have family practice nurse diploma/certificate education programs that offer additional training for RNs to gain the knowledge, skills, and abilities for this role. The Family Practice Nursing Education Program, offered by the Registered Nurses Professional Development Centre in Nova Scotia, aims to provide RNs with the knowledge and skills required to provide care within a primary healthcare setting (Registered Nurses Professional Development Centre 2016). Similarly, the George Brown College in Toronto, Ontario has developed a specialized program to prepare family practice nurses (George Brown College 2017). In British Columbia, through the School of Nursing at the University of British Columbia, there is a course dedicated to primary healthcare nursing with the option to complete a preceptorship in primary care. Family practice nurses can also avail of various continuing education opportunities in specific areas of practice to further develop their expertise in primary healthcare practice. Furthermore, the Canadian Nurses Association (CNA), in collaboration with the CFPNA, has developed a Primary Care Toolkit that contains various supports/resources to facilitate the inclusion and optimization of RNs within these settings (Canadian Nurses Association 2011).

Family Practice Nursing Competencies

A defined set of Canadian family practice nursing competencies is essential to optimize the integration of RNs within interprofessional primary healthcare teams (Martin-Misener et al. 2014; Registered Nurses' Association of Ontario 2012). Competencies are the integrated knowledge, skills, judgement, and attributes required of a nurse to practice safely and ethically in a distinct role and setting (Canadian Nurses Association 2017). Competencies are informed by Standards of Practice that define the scope and depth of practice, establish criteria for acceptable practice, and provide a framework for establishing baselines, continuing education criteria, credentialing mechanisms, job descriptions, and measuring actual performance (College of Nurses of Ontario 2002; Community Health Nurses of Canada 2011). Organizations that provide leadership for RNs in Canada, including the CNA, CFPNA, and Registered Nurses Association of Ontario (RNAO), recognize the need to develop family practice nursing competencies to strengthen the integration and optimization of the family practice nursing workforce in Canada (Canadian Family Practice Nurses Association 2017; Martin-Misener et al. 2014; Registered Nurses' Association of Ontario 2012).

With respect to enhancing workforce preparation, family practice nursing competencies will establish expectations for education and curriculum to support more formalized and structured training for this role at an undergraduate level. Specifically, a defined set of family practice nursing competencies will provide a framework to assess the extent to which Canadian undergraduate programs are integrating competencies within their curricula and identify gaps that need to be addressed. From a health leadership perspective, competencies will provide guidance regarding the role of family practice nurses in primary healthcare organizations and be fundamental for employee recruitment (e.g., job descriptions, interview questions), orientation, performance assessment and lifelong learning.

In 2014, a study conducted for the CNA reported findings from a scoping review and key informant interviews that discussed issues regarding the advancement of the role of family practice nursing within collaborative interprofessional teams and made several recommendations for optimizing the role of family practice nurses in primary healthcare, one of which was to acquire national consensus on family practice nursing competencies (Martin-Misener et al. 2014). Similarly, a national primary healthcare task force was launched by RNAO in response to the underutilization of RNs within primary healthcare in Ontario. Recommendations by this task force suggested acknowledgement of the unique competencies of family practice nurses to support RN role optimization and expansion (Registered Nurses Association of Ontario 2012). Competency development has already

occurred for other healthcare professionals in primary healthcare, such as nurse practitioners (Canadian Nurses Association 2010), pharmacists (Kennie-Kaulbach et al. 2012), and social workers (Horevitz and Manoleas 2013). Competencies have also been developed to guide the practice of nurses in some areas of community health, including public health (Community Health Nurses of Canada 2015) and home care (Community Health Nurses of Canada 2010). However, none exist to guide the practice of family practice nurses.

Environmental Scan

An environmental scan was conducted to identify literature related to family practice nursing competencies internationally and set the groundwork for family practice nursing competency development in Canada. A search was conducted in CINAHL, PubMed, and Google Scholar. Keywords included: “professional competence,” “family nursing,” “primary care,” “primary healthcare,” and “community health nursing.” No date limitations were applied and articles written in English that discussed any aspect of family practice nursing competency development were considered eligible for inclusion. Post-graduate family practice nursing education programs in Canada were contacted individually to inquire about the availability of educational competencies and other relevant resources.

Our results indicate that family practice nursing competencies are being examined internationally, and that development of family practice nursing competencies lags in Canada compared to international work (Australian Nursing and Midwifery Federation 2014; Halcomb et al. 2016; Strasser et al. 2005; Witt and de Almeida 2008). Recently, Halcomb et al. (2016) conducted an integrative review of the international literature focused on primary healthcare nursing competencies. Nine articles were included from the following countries: Australia, United Kingdom, New Zealand, Brazil, South Africa, Thailand, and Canada. Common themes in family practice nursing competencies identified across the international literature included clinical practice, communication, professionalism, health promotion, teamwork/collaboration, education, research/evaluation, and information technology. In comparison to other community health nursing areas (e.g., public health nursing, home care nursing) (Community Health Nurses of Canada 2015; Community Health Nurses of Canada, 2010), Halcomb et al. (2016) suggested that the development of family practice nursing competencies has yet to receive adequate attention and varies in the quality of the development process.

Within Canada, one project conducted in Ontario used a Delphi process to develop a family practice nursing competency framework. Consensus on competency statements among experts with knowledge/experience in primary care and/or family practice nursing was obtained. The six distinct competency domains that emerged were: (1) professional, (2) expert, (3) communicator, (4) synergist,

(5) health educator, and (6) lifelong learner, and a consensus on a list of respective competency statements was reached (Moaveni et al. 2010; Oandansan et al. 2010). This study relied on a small sample size ($n = 27$) of experts from Ontario; thus, findings are not generalizable to all provinces/territories in Canada. This may be one explanation for why this framework has not gained country-wide traction.

The Registered Nurses Professional Development Centre in Nova Scotia has developed program competencies for the evaluation of students enrolled within their Family Practice Nursing Education Program. Their program competencies consist of the following domains: patient-centred care, teamwork and collaboration, evidence-informed practice, quality improvement, safety and informatics (Registered Nurses Professional Development Centre 2016). Although competencies exist for the education of family practice nurses in one program in one province, there are no national competencies guiding the practice of family practice nurses. A national approach to family practice nursing competency development is needed that reflects the approach used by nursing and other disciplines (Community Health Nurses of Canada 2015; Strudsholm et al. 2016; Community Health Nurses of Canada 2010).

Progress Towards Canadian Family Practice Nursing Competencies

In Canada, the development of family practice nursing competencies is being led by the CFPNA, in collaboration with key stakeholders including CNA and a pan-Canadian expert research team. Importantly, the team comprises individuals from all domains of nursing, including leadership, administration, education, research, and practice. This initiative gained momentum in May 2017 at a key stakeholder meeting in Winnipeg, Manitoba hosted by Dr. Julia Lukewich, with funding from Memorial University's Public Engagement Accelerator Fund and a contribution from the CFPNA and CNA. This meeting was a critical step towards the development of a national set of family practice nursing competencies. Participants included representatives from various domains of nursing (e.g., clinical, academia, research, policy, administration). Presentations that focused on the importance of family practice nursing competencies, including a summary of the above environmental scan results, were given by Dr. Julia Lukewich (Principal Investigator), Treena Klassen (President-Elect, CFPNA), and Dr. Claire Betker (President, Canadian Nurses Association). CFPNA members at the meeting reported on some preliminary work they are doing to inform the development of family practice nursing competencies. Recommendations from a 2015 survey of CFPNA members indicated that members favoured using the Canadian Community Health Nursing Standards of Practice (Community Health Nurses of Canada 2011) as a guiding framework for the development of competencies for family practice nurses in primary healthcare. To further engage family practice nurses, a competency development seminar was offered at the CFPNA Biennial Conference in April

2018. Key outcomes from both stakeholder meetings included recognition for the importance of establishing a systematic approach to develop family practice nursing competencies, a plan to secure project funding, and strengthened partnerships between academic researchers and knowledge users. The development of a defined set of family practice nursing competencies is underway; completion is anticipated for Winter 2019.

Implications

It is anticipated that family practice nursing competencies will benefit patients, primary healthcare providers, and healthcare systems nationally. The national development of family practice nursing competencies for RNs working within primary healthcare will contribute to a competent family practice nursing workforce that can address current healthcare system issues related to access, cost, and quality of care (Martin-Misener et al. 2014; Registered Nurses' Association of Ontario 2012). Family practice nursing competencies will contribute to the development of a national understanding of the family practice nursing role for health leaders, policymakers, providers, and consumers of the healthcare system. Family practice nursing competencies will serve as a valuable tool for facilitating interprofessional team functioning by providing role clarity and articulating scope of practice for RNs working within primary healthcare. This is important because poorly defined healthcare provider roles can lead to inadequate role implementation which may compromise patient care (DiCenso et al. 2010; Ministry of Health and Long-Term Care 2005). Family practice nursing competencies will also inform revisions of nursing curricula regarding content related to primary healthcare nursing to enhance the readiness of undergraduate baccalaureate nursing students to work in primary healthcare. Importantly, family practice nursing competencies may be used to inform the public about the role of RNs working within primary healthcare. The competencies will promote, guide, and direct professional practice such that nurses' actual performance can be evaluated and continuing education can be delivered for ongoing improvement in primary care nursing (Halcomb et al. 2016; Martin-Misener et al. 2014; Registered Nurses' Association of Ontario 2012). Competencies will also aid provincial governments in actions targeted at the integration/optimization of RNs within primary care settings.

Importantly, the development of family practice nursing competencies will eventually lead to opportunities for certification. Currently, the CNA has 20 national nursing certification exams, including community health nursing. The certification exams demonstrate to health administrators across the country that the nurse has specialized knowledge in a specific practice area, and provides credibility to various disciplines in nursing. Family practice nursing competencies can be used as the basis for the addition of role-specific questions on the Community Health

Nursing Certification Exam (currently includes public health, community health, and home care nursing competencies). The CFPNA has been working in close collaboration with the CNA, as well as the Community Health Nurses of Canada (CHNC), to ensure that the revised CNA Community Health Nursing exam includes family practice nursing.

Summary

Efforts are being made to implement team-based models of primary healthcare with optimized roles for all providers. The lack of information about the role and deployment of family practice nurses in Canada has contributed to their underutilization and missed opportunities to contribute to high-quality patient care. The development of a defined set of national family practice nursing competencies is a long overdue approach to begin addressing this gap.

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References

- Amami, M., S. Ambrose, B. Hogg and S. Wong. 2017. "The Influence of Registered Nurses and Nurse Practitioners on Patient Experience with Primary Care: Results from the Canadian QUALICO-PC study." *Health Policy* 121(2017): 1215-24. doi: 10.1016/j.healthpol.2017.09.019
- Ardal, S., C. Abrahams, D. Olsen, H. Lalani and A. Kamal. 2007. *Health Human Resources Toolkit*. Health Force Ontario. Retrieved March 12, 2018. <http://tools.hhrhs.ca/index.php?option=com_mtree&task=viewlink&link_id=6200&lang=en>.
- Audas, R., A. Ryan and D. Vardy. 2009. "Where did the Doctors Go? A Study of Retention and Migration of Provisionally Licensed International Medical Graduates Practising in Newfoundland and Labrador between 1995 and 2006." *Canadian Journal of Rural Medicine* 14(1): 21-4. Retrieved March 12, 2018. <<http://www.med.mun.ca/HRU/docs/Survey-of-Provisionally-Licensed-International-Med.aspx>>.

- Australian Nursing and Midwifery Federation. 2014. *National Practice Standards for Nurses in General Practice*. Retrieved March 12, 2018. <http://www.anmf.org.au/documents/National_Practice_Standards_for_Nurses_in_General_Practice.pdf>.
- Broemeling, A.-M., D.E. Watson and F. Prebtani. 2008. "Population Patterns of Chronic Health Conditions, Comorbidity and Healthcare Use in Canada: Implications for Policy and Practice". *Healthcare Quarterly* 11(3): 70–6. doi:10.12927/hcq.2008.19859
- Canadian Family Practice Nurses Association. 2017. Retrieved March 12, 2018. <<https://www.cfpna.ca/>>.
- Canadian Institute for Health Information. 2016. *Regulated Nurses: 2016*. Retrieved March 12, 2018. <<https://www.cihi.ca/sites/default/files/document/rn-np-2016-data-tables-en-web.xlsx>>.
- Canadian Nurses Association. 2010. *Canadian Nurse Practitioner Core Competency Framework*. Ottawa: Canadian Nurses Association. Retrieved March 12, 2018. <https://cna-aiic.ca/~media/cna/files/en/competency_framework_2010_e.pdf?la=en>.
- Canadian Nurses Association. 2011. *Primary Care Toolkit*. Ottawa: Canadian Nurses Association. <<https://nurseone.ca/tools/primary-care-toolkit>>.
- Canadian Nurses Association. 2013. *Registered Nurses: Stepping Up to Transform Healthcare*. Ottawa: Canadian Nurses Association. <https://www.cna-aiic.ca/~media/cna/files/en/registered_nurses_stepping_up_to_transform_health_care_e.pdf>.
- Canadian Nurses Association. 2015. *Framework for the Practice of Registered Nurses in Canada* (2nd ed.). Ottawa: Canadian Nurses Association. Retrieved March 12, 2018. <<https://www.cna-aiic.ca/~media/cna/page-content/pdf-en/framework-for-the-practice-of-registered-nurses-in-canada.pdf?la=en>>.
- Canadian Nurses Association. 2017. *Code of Ethics for Registered Nurses*. Ottawa: Canadian Nurses Association. Retrieved March 12, 2018. <<https://www.cna-aiic.ca/html/en/Code-of-Ethics2017-Edition/index.html#26>>.
- College of Nurses of Ontario. 2002. *Professional Standards*. Toronto: College of Nurses of Ontario. Retrieved March 12, 2018. <http://www.cno.org/globalassets/docs/prac/41006_profstds.pdf>.
- Community Health Nurses of Canada. 2010. *Home Health Nursing Competencies*. Community Health Nurses of Canada. Retrieved March 12, 2018. <<https://www.chnc.ca/membership/spdf?spdf=28&file=.pdf>>.
- Community Health Nurses of Canada. 2011. *Canadian Community Health Nursing Professional Practice Model and Standards of Practice*. Community Health Nurses of Canada. Retrieved March 12, 2018. <<https://www.chnc.ca/membership/spdf?spdf=37&file=.pdf>>.
- Community Health Nurses of Canada. 2015. *Public Health Nursing Discipline Specific Competencies*. Community Health Nurses of Canada. Retrieved March 12, 2018. <<https://www.chnc.ca/membership/spdf?spdf=23&file=.pdf>>.
- Davis, K., K. Stremikis, D. Squires and C. Schoen. 2014. *Mirror, Mirror on the Wall. How the Performance of the U.S. Healthcare System Compares Internationally – 2014 Update*. New York: The Commonwealth Fund. Retrieved March 12, 2018. <http://www.commonwealthfund.org/~media/files/publications/fund-report/2014/jun/1755_davis_mirror_mirror_2014.pdf>.
- DiCenso, A., D. Bryant-Lukosius, R. Martin-Misener, F. Donald, J. Abelson, I. Bourgeault, et al. 2010. "Factors Enabling Advanced Practice Nursing Role Integration in Canada." *Nursing Leadership* 23: 211–38. doi:10.12927/cjnl.2010.22279.
- Family Practice Nurses Association of Nova Scotia. n.d. Retrieved March 12, 2018. <<https://fpnans.ca/>>.
- Fleming, P. and M. Mathews. 2012. "Retention of Specialist Physicians in Newfoundland and Labrador." *Open Medicine* 6(1): e1–9. <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3329069/pdf/OpenMed-06-e1.pdf>>.
- Fortin, M., G. Bravo, C. Hudon, A. Vanasse and L. Lapointe. 2005. "Prevalence of Multimorbidity Among Adults Seen in Family Practice." *The Annals of Family Medicine* 3(3): 223–28. doi: 10.1370/afm.272

- de Jonge, P., F.J. Huyse and F.C. Stiefel. 2006. "Case and Care Complexity in the Medically Ill." *The Medical Clinics of North America* 90(4): 679–92. doi: 10.1016/j.mcna.2006.04.005
- George Brown College. 2017. *Programs. Family Practice Nursing (Postgraduate) Program (S415)*. Retrieved March 12, 2018. <<https://www.georgebrown.ca/S415-2014-2015/>>.
- Government of Newfoundland and Labrador. 2011. *Improving Health Together: A Policy Framework for Chronic Disease Prevention and Management in Newfoundland and Labrador*. Retrieved January 24, 2018. <http://www.health.gov.nl.ca/health/chronicdisease/Improving_Health_Together.pdf>.
- Griffiths, P., J. Maben and T. Murrells. 2011. "Organisational Quality, Nurse Staffing and the Quality of Chronic Disease Management in Primary Care: Observational Study Using Routinely Collected Data." *International Journal of Nursing Studies* 48: 1199–210. doi:10.1016/j.ijnurstu.2011.03.011.
- Griffiths, P., T. Murrells, J. Maben, S. Jones and M. Ashworth. 2010. "Nurse Staffing and Quality of Care in UK General Practice: Cross-sectional Study Using Routinely Collected Data." *British Journal of General Practice* 60: 36–48. doi:10.3399/bjgp10X482086.
- Groupe de soutien à l'implantation des groupes de médecine de famille. 2003. *Devenir un groupe de médecine de famille (GMF) – Guide d'accompagnement*. Retrieved March 12, 2018. <<http://studylibfr.com/doc/4877207/devenir-un-gmf---guide-d-accompagnement>>.
- Halcomb, E., M. Stephens, J. Bryce, E. Foley and C. Ashley. 2016. "Nursing Competency Standards in Primary Health Care: An Integrative Review." *Journal of Clinical Nursing* 25(9-10):1193–205. doi: 10.1111/jocn.13224.
- Horevitz, E. and P. Manoleas. 2013. "Professional Competencies and Training Needs of Professional Social Workers in Integrated Behavioral Health in Primary Care." *Social Work in Health Care* 52(8): 752–87. doi: 10.1080/00981389.2013.791362.
- Hutchison, B., J.-F. Levesque, E. Strumpf and N. Coyle. 2011. "Primary Health Care in Canada: Systems in Motion." *The Milbank Quarterly* 89(2): 256–88. doi:10.1111/j.1468-0009.2011.00628.x.
- Keleher, H., R. Parker, O. Abdulwadud and K. Francis. 2009. "Systematic Review of the Effectiveness of Primary Care Nursing." *International Journal of Nursing Practice* 15(1):16–24. doi: 10.1111/j.1440-172X.2008.01726.x.
- Kennie-Kaulbach, N., B. Farrell, N. Ward, S. Johnston, A. Gubbels, T. Egualé, et al. 2012. *Primary Health Care Pharmacist Competencies*. Retrieved March 12, 2018. <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3372430/bin/1471-2296-13-27-S1.PDF>>.
- Loveman, E., P. Royle and N. Waugh. 2003. "Specialist Nurses in Diabetes Mellitus." *Cochrane Database Systematic Reviews* (2). doi: 10.1002/14651858.CD003286.
- Lukewich, J. 2015. *Understanding Nursing and Organizational Contributions to Chronic Disease Management within Primary Care*. Retrieved March 12, 2018. <<http://hdl.handle.net/1974/13691>>.
- Lukewich, J., T. Williamson, D. Edge, E. VanDenKerkhof and J. Tranmer. 2016. "Registered Nurse Staffing and the Management of Type 2 Diabetes Within Primary Care: A Cross-sectional Linkage Study." *Canadian Medical Association Journal* 4: 264–70. doi:10.9778/cmajo.20150113.
- Manitoba Primary Care Nurses Association. n.d. Retrieved March 12, 2018. <<https://www.mpcna.ca/>>.
- Martin-Misener, R., D. Bryant-Lukosius, C. Bullard, D. Campbell, N. Carter, F. Donald, et al. 2014. *Optimizing the Role of Nurses in Primary Care in Canada*. Ottawa: Canadian Nurses Association. Retrieved March 12, 2018. <<https://cna-aiic.ca/~media/cna/page-content/pdf-en/optimizing-the-role-of-nurses-in-primary-care-in-canada.pdf>>.
- Mathews, M., A.C. Edwards and J.T. Rourke. 2008. "Retention of Provisionally Licensed International Medical Graduates: A Historical Cohort Study of General and Family Physicians in Newfoundland and Labrador." *Open Medicine* 2(2): e62–9. Retrieved March 12, 2018. <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3090179/pdf/OpenMed-02-e62.pdf>>.
- Ministry of Health and Long-Term Care. 2005. *Report on the Integration of Primary Health Care Nurse Practitioners into the Province of Ontario*. Retrieved March 12, 2018. <http://www.health.gov.on.ca/en/common/ministry/publications/reports/nurseprac03/exec_summ.pdf>.

- Moaveni, A., A. Gallinaro, L.G. Conn, S. Callahan, M. Hammond and I. Oandasan. 2010. "A Delphi Approach to Developing a Core Competency Framework for Family Practice Registered Nurses in Ontario." *Nursing Leadership* 23(4): 45–60. doi:10.12927/cjnl.2011.22142
- Norful, A., G. Martsolf, K. de Jacq and L. Poghosyan. 2017. "Utilization of Registered Nurses in Primary Care Teams: A Systematic Review." *International Journal of Nursing Studies* 74: 15–23. <<https://doi.org/10.1016/j.ijnurstu.2017.05.013>>.
- Nova Scotia Health Authority. 2017. *Community Health Team Communities*. Retrieved March 12, 2018. <<http://www.cdha.nshealth.ca/community-health-teams/communities>>.
- Oandasan, I.F., M. Hammond, L.G. Conn, S. Callahan, A. Gallinaro and A. Moaveni. 2010. "Family Practice Registered Nurses: The Time Has Come." *Canadian Family Physician* 56: 375–82. Retrieved March 12, 2018. <<http://www.cfp.ca/content/cfp/56/10/e375.full.pdf>>.
- Poitras, M.E., M.C. Chouinard, M. Fortin and F. Gallagher. 2017. "Description of Nursing Activities for Chronic Disease Patients in Family Medicine Groups: A Practice Analysis." *Nursing Research* 67(1): 35–42. doi: 10.1097/NNR.0000000000000253
- Primary Care Nurses of Ontario. 2017. Retrieved March 12, 2018. <<http://www.ofpn.ca/>>.
- Registered Nurses Association of Ontario. 2012. *Primary Solutions for Primary Care: Maximizing and Expanding the Role of the Primary Care Nurse in Ontario*. Retrieved March 12, 2018. <http://rnao.ca/sites/rnao-ca/files/Primary__Care_Report_2012.pdf>.
- Registered Nurses Professional Development Centre. 2016. *Family Practice Nursing Education Program*. Retrieved March 12, 2018. <<http://rnpdc.nshealth.ca/Programs/RNPDC-Programs/default.asp?mn=1.50>>.
- Strasser, S., L. London and E. Kortenbout. 2005. "Developing a Competence Framework and Evaluation Tool for Primary Care Nursing in South Africa." *Education for Health* 18(2): 133–44. doi: 10.1080/13576280500145615.
- Strudsholm, T., L.M. Meadows, A.R. Vollman, W.E. Thurston and R. Henderson. 2016. "Using Mixed Methods to Facilitate Complex, Multiphased Health Research." *International Journal of Qualitative Methods* 15: 1–11. doi:10.1177/1609406915624579
- Valaitis, R.K., N. Carter, A. Lam, J. Nicholl, J. Feather and L. Cleghorn. 2017. "Implementation and Maintenance of Patient Navigation Programs Linking Primary Care with Community-Based Health and Social Services: A Scoping Literature Review." *BMC Health Services Research* 17(1): 116. doi: 10.1186/s12913-017-2046-1
- Witt, R.R. and M.C.P. de Almeida. 2008. "Identification of Nurses' Competencies in Primary Health Care through a Delphi Study in Southern Brazil." *Public Health Nursing* 25(4): 336–43. doi: 10.1111/j.1525-1446.2008.00714.x.