



Articles

Interprofessional Education in Canadian Nursing Programs and Implications for Continuing Education

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Abstract

In 2010, the Canadian Association of Schools of Nursing, the accrediting body for nursing programs in Canada, became part of the Accreditation of Interprofessional Health Education initiative. In turn, interprofessional education (IPE) is now a requirement in nursing curricula. Although the requirement is formally in place, how it is achieved varies substantially. This paper explores how IPE has been integrated within Canadian nursing programs. Implications for the continuing education of nurses and other health professionals in order to achieve excellence in interprofessional practice are also considered.

Résumé

Depuis 2010, l'Association canadienne des écoles de sciences infirmières (ACESI), l'organisme d'agrément des programmes universitaires de sciences infirmières au Canada, fait partie de l'initiative intitulée Agrément de la formation interprofessionnelle en sciences de la santé (AFISS). De son côté, la formation interprofessionnelle constitue désormais une exigence des programmes de formation en soins infirmiers. Bien que cette exigence soit formellement en place, la façon d'y répondre varie grandement. Ce document explore comment la formation interprofessionnelle est intégrée aux programmes de formation



en soins infirmiers du Canada. L'article aborde également ce que cela implique en matière de formation continue pour les infirmiers et autres professionnels de la santé, afin qu'ils atteignent l'excellence dans leur pratique interprofessionnelle.

Introduction

Interprofessional education (IPE) “occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care” (Centre for Advancement of Interprofessional Education, 2002). Identified in the Romanow Report (2002) as critical to the delivery of health services and programs in contemporary Canada, IPE and collaborative patient care became the basis of the Interprofessional Education for Collaborative Patient-Centred Practice (IECPCP) Strategy (Gilbert, 2010). In 2006, the Canadian Interprofessional Health Collaborative (CIHC) was developed to ensure that IPE and collaboration occur across the health professions (CIHC, 2010; Gilbert, 2010).

Later, in July 2007, *Interprofessional Care: A Blueprint for Action in Ontario* was released by Health Force Ontario (Interprofessional Care Steering Committee). This document provided information and recommendations about how to enhance the functioning of the Ontario healthcare system through the practice of interprofessional care. The report further identified that it had been difficult to integrate IPE into curricula, due to the lack of accreditation standards for IPE. The lack of best practices in IPE within the curricula of health sciences programs has also been noted in the literature (Abu-Rish et al., 2012).

Interprofessional instructional and institutional strategies are quickly becoming a major focus of professional health and social education programs in order to better prepare health professionals for safe, competent, and collaborative practice (Frenk et al., 2010; Interprofessional Care Strategic Implementation Committee, 2010; Reeves et al., 2010; Reeves, Tassone, Parker, Wagner, & Simmons, 2012; World Health Organization Study Group on Interprofessional Education and Collaborative Practice, 2010). Further, the World Health Organization recently recommended that IPE needs to be implemented in programs to prepare health professionals for intercollaborative practice in the pre-licensure period, and it emphasized that research is required to examine the relevance of IPE for communities served, cost-effectiveness, and sustainability (World Health Organization, 2013). Continuing education for health professionals is likewise vital to achieve the benefits of collaborative, team-based care founded on an interprofessional model.



This paper describes the state of IPE in nursing education in Canada since 2012. In addition, it explores the role of continuing education in sustaining interprofessional learning and care in practice. Continuing educators are challenged to reflect on how they can support this critical practice.

Interprofessional Education in Nursing Education in Canada

While IPE emerged over 30 years ago on the international level, it has become particularly important in educational, research, policy, and regulatory activity in the past 10 years (Reeves et al., 2012). Formal inclusion of IPE activities in Canadian nursing programs has likewise developed recently, particularly over the last five years. Most significant is that the Canadian Association of Schools of Nursing (CASN) now includes IPE as an accreditation standard (CASN, 2012). CASN is a member of the Accreditation of Interprofessional Health Education initiative (AIPHE), which has brought together the accreditation bodies for medicine, nursing, occupational therapy, social work, pharmacy, and physiotherapy in order to develop principles, practices, and competencies for the integration of IPE within accreditation standards (AIPHE, 2011).

In the case of nursing, CASN has indicated that “learners [need to] develop functional working relationships, including intra/interprofessional and intersectoral collaboration” (2012, p. 1). Given this requirement, Canadian nursing programs must now formally demonstrate the integration of IPE in their curricula.

Nursing schools have had a myriad of experiences—positive and negative—in the effort to embed IPE within programs. The objective of this paper is to: (i) review the literature to discern how and to what extent IPE is supported by nursing programs; (ii) share important themes; (iii) consider areas for further study; and (iv) reflect on the role of continuing education in supporting interprofessional learning and practice.

IPE and Nursing Curricula since 2012

The principal theme identified in a review of IPE and nursing programs in Canada was that interprofessional education is occurring in classrooms and in clinical practice settings. These circumstances have been associated with positive outcomes, including improved perceptions of other health professionals as team members. Benefits of the interprofessional learning process have also been identified. Several studies of IPE in Canadian nursing programs occurring prior to 2012 found similar results (Ateah et al., 2011; Basran et al., 2012; Bilodeau et al., 2010; Cooper, Macmillan, Beck, & Paterson, 2009; Graybeal, Long, Scalise-Smith, & Zeibig, 2010; Dobson et al., 2009; Meffe, Moravac, & Espin, 2012; Salvatori, Berry, & Eva, 2007; Sommerfeldt, Barton, Stayko, Patterson, & Pimlott, 2011).



A community-based participatory study in Alberta involved a partnership between the University of Alberta and healthcare delivery agencies. A team of healthcare professionals, unit managers, faculty representatives, and a student involved in an interprofessional experience collaborated to implement an interprofessional clinical learning unit (Vanderzalm, Hall, McFarlane, Rutherford, & Patterson, 2013). Pre-implementation surveys were completed by 14 patient care team members, five students, and five faculty members from the following professions: nursing, medicine, occupational therapy, physical therapy, speech language pathology, recreation therapy, social work, nutrition, clinical psychology, audiology, and dentistry. Results indicated that interprofessional education was perceived as a positive way to improve communication and interaction with students, and that interprofessional teamwork was working well in the unit (Vanderzalm et al., 2013). Post-implementation focus groups involved 11 patient care team members, two students, and five faculty members. Six themes emerged from the focus groups: communication; informal interprofessional learning; role awareness; positive learning environment; and logistics and challenges (Vanderzalm et al., 2013). The support of leaders and managers was identified as extremely important. Because of the complexity of the roles of these leaders, the suggestion was made that another role should be developed, such as interprofessional coordinator (Vanderzalm et al., 2013).

Fortugno, Chandra, Espin, and Gucciardi (2013) examined an interprofessional placement in a Canadian urban secondary school where four students from nursing, early childhood education, child and youth care, and nutrition programs worked together to deliver “healthy living” modules. A focus group was conducted with the students from nursing, early childhood education, and nutrition; another focus group was conducted with two preceptors. Reflections were completed by the students on a weekly basis throughout the seven-month placement. Two themes emerged from the findings: team functioning and a shift in perspectives, which suggested a positive interprofessional experience in the school setting. The idea that interprofessional skills and experiences would enhance future participation in teams was also identified (Fortugno et al., 2013).

Variety in learning strategies was also a theme. Interprofessional learning through simulation, modelling, and combined learning strategies was noted. These strategies have been associated with improved perceptions of professionals from other backgrounds as team members.

A non-experimental, pre-test / post-test study at the University of Manitoba investigated the interprofessional knowledge, skills, and attitudes of nursing, medical, and pharmacy students involved in a simulated night shift (Joyal, Katz, Harder, & Dean, 2015). Forty-five students ($n = 12$ medicine, $n = 23$ nursing, $n = 10$ pharmacy) responded to the pre-event survey, while 11 students ($n = 5$ medicine, $n = 6$ nursing) responded to the post-event survey. In the pre-event survey, students reported having a positive perception of interprofessional education and how it could improve patient care through teamwork and improved communication. In the post-event survey, students indicated that they valued the interprofessional simulation experience



and had an improved understanding of the roles of other professions and the importance of each team member, as well as increased confidence about working as a team member.

An exploratory descriptive ethnographic study investigated the experiences of nursing and pharmacy students who took part in three simulation learning activities over a six-hour period during their final year (Paul, Olson, Sadowski, Parker, & Alook, 2014). The focus of the study was to determine how the interprofessional simulation learning experience assisted the students in learning both discipline-specific and interprofessional skills. Results indicated that the simulation experience was positive, increasing confidence, improving students' understanding of their professional roles and the roles of others, and leading to a valuing of interprofessional teamwork and relationship-building.

Ruiz, Ezer, and Purden (2013) employed an exploratory case-study design to investigate pedagogical strategies used in IPE as well as modelling of interprofessional behaviour by faculty over two years. They paid attention to a number of required learning activities for first-year students in medicine, nursing, occupational therapy, physiotherapy, and communication sciences at McGill University, in Montréal, Québec. A total of 11 university IPE facilitators and 97 students from across the professions were video- and audio-taped in several learning situations. Findings confirmed that strategies such as creating a supportive learning environment, modelling interprofessional collaboration, and using open-ended questions improved interprofessional learning. Faculty development was identified as important to this type of teaching role, although it is time-intensive and requires support.

Discussion

Much of the highlighted research involving Canadian schools of nursing focused on the efficacy of IPE intervention itself. Efficacy was understood to include perceptual changes about other professionals, improvements in communication, and ideas and strategies about teamwork (Ateah et al., 2011; Bilodeau et al., 2010; Cooper et al., 2009; Fortugno et al., 2013; Joyal et al., 2015; Meffe et al., 2012; Paul et al., 2014; Salvatori et al., 2007; Sommerfeldt et al., 2011; Vanderzalm et al., 2013). These findings are consistent with several systematic reviews (Hammick, Freeth, Koppel, Reeves, & Barr, 2007; Lapkin, Levett-Jones, & Gilligan, 2013; Reeves et al., 2010; Reeves et al., 2012). Additionally, several of the reviewed studies were based on one-time interventions or voluntary extracurricular activities (Ateah et al., 2011; Cooper et al., 2009; Fortugno et al., 2013; Joyal et al., 2015; Meffe et al., 2012; Paul et al., 2014; Salvatori et al., 2007).

Some of the studies examined the integration of IPE in clinical settings (Basran et al., 2012; Fortugno et al., 2013; Sommerfeldt et al., 2011; Vanderzalm et al., 2013). By contrast, two studies focused solely on classroom learning (Cooper et al., 2009; Dobson et al., 2009), while three others focused on the inclusion of IPE in both classroom and practice settings (Ateah et al., 2011; Meffe et al., 2012; Salvatori et al., 2007). Strategies identified as facilitators of



interprofessional learning included patient care simulation activities (Joyal et al., 2015; Paul et al., 2014), modelling, and other supportive learning strategies (Ruiz et al., 2013). Factors reported to enhance IPE were faculty development, faculty champions, and administrative supports and resources (Basran et al., 2012; Bilodeau et al., 2010; Graybeal et al., 2010; Ho et al., 2008; Ruiz et al., 2013; Sommerfeldt et al., 2011; Vanderzalm et al., 2013). The identified challenges included the time-intensive nature of IPE activities, difficulties with scheduling, and lack of professional identity in junior-year students (Basran et al., 2012; Bilodeau et al., 2010; Graybeal et al., 2010; Ho et al., 2008; Ruiz et al., 2013; Sommerfeldt et al., 2011; Vanderzalm et al., 2013). These findings are consistent with the findings of Reeves et al. (2012) and another recent literature review that explored the barriers to and enablers of sustaining IPE (Lawlis, Anson, & Greenfield, 2014). No studies indicated that IPE should not be included in health profession programs, despite the barriers and challenges, and no studies suggested that the inclusion of IPE in curricula makes no difference at all. There was a limited amount of research demonstrating the integration of IPE across all years of programs (Bilodeau et al., 2010; Ruiz, et al., 2013).

IPE and Continuing Education

Continuing interprofessional education occurs when members of two or more health and/or social care professions learn with, from, and about each other in practice settings after graduation/post-licensure to improve collaboration and the quality of care (Reeves, 2009). The literature identifies two strategies for facilitating interprofessional learning: modelling of interprofessional behaviour and care by faculty, and faculty development with respect to IPE (Basran et al., 2012, Bilodeau et al., 2010, Graybeal et al., 2010, Ho et al., 2008, Ruiz et al., 2013, Sommerfeldt et al., 2011, Vanderzalm et al., 2013). These two findings point to the significance of continuing IPE occurring with healthcare professions in practice, and with educators in the learning arena, be that a classroom, simulation laboratory, or clinical practice setting. Continuing interprofessional education for those involved in the education of nursing undergraduate students is crucial to the successful integration of interprofessional learning pre-licensure, and to the support of interprofessional learning in practice post-licensure. Reeves (2009) conducted an overview of continuing interprofessional education and identified faculty development as one of seven trends emerging in the past several years, thus confirming the importance of IPE faculty development in the last several years.

There is additional evidence that, for some health professions, limited interaction with other professions and lack of knowledge and experience with IPE reduces their support for IPE when it is involved in pre-licensure education in a practice setting (Sommerfeldt et al., 2011). These limitations directly affect how students perceive and learn about interprofessional interactions and practices in the clinical setting, since, as stated previously, modelling is an influence on student learning. Further, the process of continuing IPE necessitates that mutual respect and trust exist within the group and context involved (Legare et al., 2011). If teams of healthcare



professionals do not know how to work with each other due to a lack of knowledge about or respect for each other's professions, interprofessional learning will not be successfully demonstrated to students. This reality builds the case for ensuring that continuing IPE takes place in practice settings and that content includes materials directly relevant to IPE. Such learning opportunities assists health professionals in becoming more knowledgeable about other professions and contribute to safe team-based practice and care. Finally, the development and delivery of interprofessional continuing education programs also require consideration of the varying learning needs of the healthcare professions involved (Zwarenstein & Reeves, 2006).

Final Thoughts

Although IPE curriculum is being integrated within Canadian nursing programs in diverse ways, further programming and research are required. Among other things, this work needs to investigate the experiences of nursing faculty and program administrators in advancing IPE. The resources required to support IPE likewise require particular consideration. In this way, strategies for integrating IPE within curricula and ways for overcoming barriers can be determined, thus enabling nursing programs to meet the IPE accreditation requirement more effectively.

At the same time, there is considerable work to do in the continuing education sector to ensure that the learning initiated at the undergraduate level is sustained and advanced when nursing graduates and graduates from other health programs begin practice. Moreover, it is important to recognize that practicing nurses experience teamwork and collaboration in ways that are similar to but also different from how nursing students do. Because of this, continuing educators are encouraged to work closely with nurses and other members of interprofessional care teams to ensure that IPE theory and practice are complementary and that identified IPE gaps are addressed. Acknowledging that Canadian health systems are increasingly dependent on high-functioning interprofessional teams, there is important work to be done by continuing educators, including administrators, program planners, instructional designers, instructors, and others. With Canada's healthcare system experiencing the stressors of an aging population, the health impacts of globalization, escalating infrastructure costs, and shrinking budgets, now is a critical time for continuing education to support and advance interprofessional knowledge and practice in the health setting.

References

- Abu-Rish, E., Kim, S., Choe, L., Varpio, L., Malik, E., White, A. A., . . . Zierler, B. (2012). Current trends in interprofessional education of health sciences students: A literature review. *Journal of Interprofessional Care, 26*(6), 444–451.
doi: <http://dx.doi.org/10.3109/13561820.2012.715604>



- Accreditation of Interprofessional Health Education [AIPHE]. (2010). *Principles and practices for integrating interprofessional education into the accreditation standards for six health professions in Canada*. Retrieved from <http://www.cihc.ca/files/aiphe/resources/AIPHE%20Principles%20and%20Practices%20Guide%20-%20v.2%20EN.pdf>
- Accreditation of Interprofessional Health Education [AIPHE]. (2011). *Interprofessional health education accreditation standards guide*. Retrieved from http://www.cihc.ca/files/resources/public/English/AIPHE%20Interprofessional%20Health%20Education%20Accreditation%20Standards%20Guide_EN.pdf
- Ateah, C. A., Snow, W., Wener, P., MacDonald, L., Metge, C., Davis, P., & Anderson, J. (2011). Stereotyping as a barrier to collaboration: Does interprofessional education make a difference? *Nurse Education Today*, *31*(2), 208–213.
doi: <http://dx.doi.org/10.1016/j.nedt.2010.06.004>
- Basran, J. F. S., Dal Bello-Haas, V., Walker, D., Macleod, P., Allen, B., D'Eon, M. . . Trinder, K. (2012). The longitudinal elderly person shadowing program: Outcomes from an interprofessional senior partner mentoring program. *Gerontology and Geriatrics Education*, *33*(3), 302–323. doi: <http://dx.doi.org/10.1080/02701960.2012.679369>
- Bilodeau, A., Dumont, S., Hagan, L., Pare, L., Razmpoosh, M., Houle, N., & Iloko-Fundi, M. (2010). Interprofessional education at Laval University: Building an integrated curriculum for patient-centred practice. *Journal of Interprofessional Care*, *24*(5), 524–535.
doi: <http://dx.doi.org/10.3109/13561821003724026>
- Canadian Association of Schools of Nursing [CASN]. (2012). CASN accreditation program: Updates to key elements and interpretations. Unpublished addendum to CASN Accreditation Standards. Ottawa, ON: CASN.
- Canadian Interprofessional Health Collaborative [CIHC]. (2010). *A national interprofessional competency framework*. Retrieved from http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf
- Centre for Advancement of Interprofessional Education [CAIPE]. (2002). *Definition of interprofessional education*. Retrieved from <http://www.caipe.org.uk/about-us/defining-ipe/>
- Cooper, B. A., MacMillan, B. D., Beck, R. A., & Paterson, M. L. (2009). Facilitating and evaluating a student-led seminar series on global health issues as an opportunity for interprofessional learning for health science students. *Learning in Health and Social Care*, *8*(3), 210–222. doi: <http://dx.doi.org/10.1111/j.1473-6861.2008.00212.x>
- Dobson, R. T., Stevenson, K., Busch, A., Scott, D. J., Henry, C., & Wall, P.A. (2009). A quality improvement activity to promote interprofessional collaboration among health. *American Journal of Pharmaceutical Education*, *73*(4), 1–7.
- Fortugno, M., Chandra, S., Espin, S., & Gucciardi, E. (2013). Fostering successful interprofessional teamwork through an undergraduate student placement in a secondary school. *Journal of Interprofessional Care*, *27*, 326–332.
doi: <http://dx.doi.org/10.3109/13561820.2012.759912>



- Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T., & Zurayk, H. (2010). Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *The Lancet*, 376, 1923–1958. doi: [http://dx.doi.org/10.1016/S0140-6736\(10\)61854-5](http://dx.doi.org/10.1016/S0140-6736(10)61854-5)
- Gilbert, J. H. V. (2010). The status of interprofessional education in Canada. *Journal of Allied Health* [Suppl. issue], 39(3), 216–223. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21174043>
- Graybeal, C., Long, R., Scalise-Smith, D., & Zeibig, E. (2010). The art and science of interprofessional education. *Journal of Allied Health* [Suppl. issue], 39(3), 232–237. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21174045>
- Hammick, M., Freeth, D., Koppel, I., Reeves, S., & Barr, H. (2007). The best evidence systematic review of interprofessional education: BEME Guide No. 9. *Medical Teacher*, 29, 735–751. doi: <http://dx.doi.org/10.1080/01421590701682576>
- Ho, K., Jarvis-Selinger, S., Borduas, F., Frank, B., Hall, P., Handfield-Jones, R., & Rouleau, M. (2008). Making interprofessional education work: The strategic roles of the academy. *Academic Medicine*, 83(9), 934–940. doi: <http://dx.doi.org/10.1097/ACM.0b013e3181850a75>
- Interprofessional Care Steering Committee. (2007). *Interprofessional care: A blueprint for action in Ontario*. Toronto, ON: Health Force Ontario.
- Interprofessional Care Strategic Implementation Committee. (2010). *Implementing interprofessional care in Ontario: Final report of the Interprofessional Care Strategic Implementation Committee*. Toronto, ON: Health Force Ontario.
- Joyal, K. M., Katz, C., Harder, N., & Dean, H. (2015). Interprofessional education using simulation of an overnight inpatient ward shift. *Journal of Interprofessional Care*, 29(3), 268–270. doi:10.3109/13561820.2014.944259
- Lapkin, S., Levett-Jones, T., & Gilligan, C. (2013). A systematic review of the effectiveness of interprofessional education in health professional programs. *Nurse Education Today*, 33, 90–102. doi: <http://dx.doi.org/10.1016/j.nedt.2011.11.006>
- Lawlis, T. R., Anson, J., & Greenfield, D. (2014). Barriers and enablers that influence sustainable interprofessional education: A literature review. *Journal of Interprofessional Care*, 28(4), 305–310. doi: <http://dx.doi.org/10.3109/13561820.2014.895977>
- Legare, F., Borduas, F., MacLeod, T., Sketris, I., Campbell, B., & Jacques, A. (2011). Partnerships for knowledge translation and exchange in the context of continuing professional development. *Journal of Continuing Education in the Health Professions*, 31(3), 181–187. doi: <http://dx.doi.org/10.1002/chp.20125>
- Meffe, F., Moravac, C. C., & Espin, S. (2012). An interprofessional education pilot program in maternity care: Findings from an exploratory case study of undergraduate students. *Journal of Interprofessional Care*, 26, 183–188. doi:10.3109/13561820.2011.645089



- Paul, P., Olson, J. K., Sadowski, C., Parker, B., & Alook, A. (2014). Interprofessional simulation learning with nursing and pharmacy students: A qualitative study. *Quality Advancement in Nursing Education—Avances en formation infirmiere*, 1(1), article 6. Retrieved from <http://qane-afi.casn.ca/journal/vol1/iss1/6>
- Reeves, S. (2009). An overview of continuing interprofessional education. *Journal of Continuing Education in the Health Professions*, 29(3), 142–146. Retrieved from http://eo2.commpartners.com/users/acme/downloads/Reeves_article.pdf
- Reeves, S., Tassone, M., Parker, K., Wagner, S. J., & Simmons, B. (2012). Interprofessional education: An overview of key developments in the past three decades. *Work*, 41, 233–245. doi: <http://dx.doi.org/10.3233/WOR-2012-1298>
- Reeves, S., Zwarenstein, M., Goldman, J., Barr, H., Freeth, D., Koppel, I., & Hammick, M. (2010). The effectiveness of interprofessional education: Key findings from a new systematic review. *Journal of Interprofessional Care*, 24(3), 230–241.
- Romanow, R. J. (2002). *Building on values: The future of health care in Canada*. Report of the Commission on the Future of Health Care in Canada. Ottawa, ON: National Library of Canada. Retrieved from <http://publications.gc.ca/collections/Collection/CP32-85-2002E.pdf>
- Ruiz, M. G., Ezer, H., & Purden, M. (2013). Exploring the nature of facilitating interprofessional learning: Findings from an exploratory study. *Journal of Interprofessional Care*, 27(6), 489–495. doi: <http://dx.doi.org/10.3109/13561820.2013.811640>
- Salvatori, P. S., Berry, S. C., & Eva, K. W. (2007). Implementation and evaluation of an interprofessional education initiative for students in the health professions. *Learning in Health and Social Care*, 6(2), 72–82.
- Sommerfeldt, S. C., Barton, S. S., Stayko, P., Patterson, S. K., & Pimlott, J. (2011). Creating interprofessional clinical learning units: Developing an acute-care model. *Nurse Education in Practice*, 11(4), 273–277. doi: <http://dx.doi.org/10.1016/j.nepr.2010.12.003>
- Vanderzalm, J., Hall, M. D., McFarlane, L., Rutherford, L., & Patterson, S. K. (2013). Fostering interprofessional learning in a rehabilitation setting: Development of an interprofessional clinical learning unit. *Rehabilitation Nursing*, 38(4), 178–185. doi: <http://dx.doi.org/10.1002/rnj.78>
- World Health Organization. (2013). *Transforming and scaling up health professionals' education and training*. Geneva, Switzerland: World Health Organization. Retrieved from http://apps.who.int/iris/bitstream/10665/93635/1/9789241506502_eng.pdf?ua=1
- World Health Organization Study Group on Interprofessional Education and Collaborative Practice. (2010). *Framework for action on interprofessional education and collaborative practice*. Geneva, Switzerland: World Health Organization. Retrieved from http://www.who.int/hrh/resources/framework_action/en/
- Zwarenstein, M., & Reeves, S. (2006). Knowledge translation and interprofessional collaboration: Where the rubber of evidence-based care hits the road of teamwork. *The Journal of Continuing Education in the Health Professions*, 26, 46–54. doi: <http://dx.doi.org/10.1002/chp.50>



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