Équipes d'intervenants en santé familiale

Peut-on enseigner aux professionnels de la santé à travailler ensemble?

Sophie Soklaridis PhD(C) **Ivy Oandasan** MD MHSc CCFP FCFP **Shandra Kimpton** MHSc

RÉSUMÉ

OBJECTIF Déterminer l'opinion des enseignants de diverses professions de la santé primaire sur le développement et l'utilisation d'équipe universitaires de santé familiale pour faire, enseigner et servir de modèles pour la collaboration interprofessionnelle et sur l'implantation d'une formation interprofessionnelle (FIP) intégrée à la formation universitaire en soins primaires.

TYPE D'ÉTUDE Étude qualitative utilisant des groupes de discussion.

CONTEXTE Établissements d'enseignement supérieur de l'Ontario.

PARTICIPANTS Un échantillon raisonné de 36 participants comprenant infirmières, pharmaciens, orthophonistes, physiothérapeutes, ergothérapeutes, travailleurs sociaux et médecins de famille.

MÉTHODE Les participants devaient participer à des groupes de discussion composés de 6 à 8 professionnels de la santé. Les thèmes ont été identifiés à partir de l'analyse qualitative des données recueillies par la technique de la théorie ancrée.

PRINCIPALES OBSERVATIONS Trois thèmes principaux ont été identifiés : l'absence de consensus sur l'intérêt qu'il y a à ce que les futures équipes universitaires de médecine familiale enseignent la FIP, l'absence d'enseignement formel sur la collaboration interprofessionnelle, le fait que les rares projets en ce domaine sont destinés surtout aux médecins de famille et très peu aux autres professions de la santé, et la confusion qui règne au sein des professions de la santé concernant la définition de la FIP.

CONCLUSION Il y a lieu d'examiner le rôle que des équipes de santé familiale oeuvrant dans un contexte universitaire de soins primaires pourraient jouer pour permettre aux étudiants d'observer le déroulement du travail en équipe et d'apprendre à collaborer. À moins qu'on développe des structures universitaires capables de fournir aux professionnels de la santé la formation nécessaire au travail en équipe, les prochaines générations de professionnels de la santé continueront de travailler comme elles l'ont toujours fait et les efforts de réforme ont peu de chance d'aboutir.

POINTS DE REPÈRE DU RÉDACTEUR

- Comme médecins de famille, on nous incite à travailler en collaboration avec d'autres professionnels de la santé, mais ce type de travail peut-il faire l'objet de formation? Peut-on enseigner aux professionnels de la santé comment travailler en collaboration?
- Cette étude rappelle certains points importants de la formation interprofessionnelle (FIP). Il n'y a pas de consensus sur la nature exacte de la FIP. Il n'existe pas de critères établis pour l'enseignement de la FIP. Les tensions interprofessionnelles persistent, même au sein des institutions académiques qui tentent d'introduire la FIP.
- Des équipes œuvrant en santé familiale pourraient servir de modèle pour enseigner à une nouvelle génération de médecins comment collaborer avec d'autres professionnels de la santé.

Cet article a fait l'objet d'une révision par des pairs.
Le texte intégral est accessible en anglais à www.cfpc.ca/cfp
Can Fam Physician 2007;53:1198-1199

Family health teams

Can health professionals learn to work together?

Sophie Soklaridis PhD(C) **Ivy Oandasan** MD MHSc CCFP FCFP **Shandra Kimpton** MHSc

ABSTRACT

OBJECTIVE To learn what educators across the health professions involved in primary health care think about the use and development of academic family health teams to provide, teach, and model interprofessional collaboration and about the introduction of interprofessional education (IPE) within structured academic primary care.

DESIGN Qualitative study using focus groups.

SETTING Higher education institutions across Ontario.

PARTICIPANTS Purposeful sample of 36 participants from nursing, pharmacy, speech language pathology, occupational and physical therapy, social work, and family medicine.

METHOD Participants were invited to join focus groups of 6 to 8 health professionals. Themes were derived from qualitative analysis of data gathered using a grounded-theory approach.

MAIN FINDINGS Three major themes were identified: the lack of consensus on opportunities for future academic family health teams to teach IPE, the lack of formalized teaching of interprofessional collaboration and the fact that what little has been developed is primarily for family physicians and hardly at all for other health professionals, and the confusion around the definition of IPE across health professions.

CONCLUSION The future role of family health teams in academic primary care settings as a place for learners to see teamwork in action and to learn collaboration needs to be examined. Unless academic settings are developed to provide the necessary training for primary health care professionals to work in teams, a new generation of health care professionals will continue to work in status quo environments, and reform initiatives are unlikely to become sustainable over time.

EDITOR'S KEY POINTS

- As family physicians, we are told we should be working in collaboration with other health professionals, but can teamwork be taught? Can health professionals be taught to work collaboratively?
- This study highlights some important issues in interprofessional education (IPE). There is no consensus on what IPE really is. There are no standardized criteria for teaching IPE. Interprofessional tension, even within academic institutions developing IPE initiatives, is still a reality.
- Family health teams might offer a way to teach a new generation of physicians how to work together with other health professionals.

This article has been peer reviewed.
Full text available in English at **www.cfpc.ca/cfp**
Can Fam Physician 2007;53:1198-1199

In many countries around the world, government and health care sectors have placed importance on developing collaborative patient-centred practices to improve the health of their populations.[1-4] Collaborative practice involves health care professionals working and making decisions together. Collaboration is "an interprofessional process of communication and decision making that enables the separate and shared knowledge and skills of health care providers to synergistically influence the client/patient care provided."[5]

Collaborative patient-centred practice is designed to "promote the active participation of each discipline in patient care. It enhances patient and family-centred goals and values, provides mechanisms for continuous communication among caregivers, optimizes staff participation in clinical decision making within and across disciplines, and fosters respect for disciplinary contributions from all professionals."[1]

In Canada, much discussion has focused on changing the way health care providers are educated and trained.[6] Interprofessional education (IPE) has been formally defined as teaching health professionals how to work collaboratively. This form of education is described as "occasions when members (or students) of 2 or more professions associated with health or social care engage in learning with, from, and about each other."[7]

There is a call for changing the way health professionals are educated so that they will have the knowledge, skills, and attitudes to carry out collaborative patient-centred practice.[2,3] Funding has been allocated for IPE by the federal government through Health Canada's Interprofessional Education for Collaborative Patient-Centred Practice initiative.[8] Quite recently, the Ontario government provided another $5 million for IPE initiatives.[9]

If health care professionals are expected to work together and share expertise in a team, then their education and training should take place in a team environment to prepare them for this type of working arrangement.[2] For Ontario, the solution to the growing recognition that population health needs are diverse and complex and thus best met by teams of health professionals is the development of family health teams (FHTs).[10] An FHT is an approach to primary care that brings together various health care providers to coordinate the highest possible quality of care for patients.[10] Family health teams consist of doctors, nurses, nurse practitioners, and other health professionals who work collaboratively.

Implementation of FHTs does not address the gap between education and practice, however. The literature reveals that health care educators sometimes do not feel confident teaching future physicians and other health professionals how to be good collaborators in patient-centred care.[11] Should teamwork be taught at all? The Royal College of Physicians and Surgeons of Canada states that the collaborator role is one core competency role in which all specialists must be proficient before graduating. For some time, teamwork in health care has been thought of as something magical without specific definable competencies. In the last few years, this notion has changed, and an art and science of teaching collaboration through IPE have emerged.

Teaching IPE remains challenging, however. No established faculty development programs in the country train faculty how to teach collaboration.[12] There are no curriculums for teaching collaboration. Our educational knowledge base does not include ways to train both faculty and students in how to practise interprofessional collaborative patient-centred care. If there is a movement toward interprofessional collaborative patient-centred practice, we need to address these deficiencies. This study aimed to explore the current understanding of IPE among primary health care educators working in various faculties; the opportunities and challenges of implementing and advancing the teaching of collaborative patient-centred care in curriculums in primary health care in Ontario; and whether development of FHTs in academic settings in Ontario could provide an environment to model, teach, and train future family physicians and other health professionals working in primary care to be competent collaborators.

Ms Soklaridis *is a Research Associate at the Department of Family and Community Medicine at the University Health Network—Toronto Western Hospital and is currently a doctoral candidate in the Department of Public Health Science at the University of Toronto in Ontario.* **Dr Oandasan** *is an academic family physician at the Family Health Centre in the Department of Family and Community Medicine at the University Health Network—Toronto Western Hospital, is Director of the Office of Interprofessional Education at the University of Toronto, and is a family medicine researcher with the Family Health Research Unit in the Department of Family and Community Medicine at the University of Toronto.* **Ms Kimpton** *is a Project Manager for the "Ward of the 21st Century" in the Calgary Health Region in Alberta.*

METHODS

Design

Qualitative methods[13] were chosen to better understand how educators in various health professions view iIPE in the realm of primary care. Using focus groups capitalized on dynamic communication between participants and proved to be an efficient way of gathering information on participants' experiences and opinions.

Setting

Six higher education institutions, primarily universities across Ontario, that had academic faculty teaching in primary care disciplines.

Sample

Purposeful sampling[13] was used to recruit 36 participants from nursing, pharmacy, speech language pathology, occupational and physical therapy, social work, and family medicine. All participants were faculty members from the 6 universities in Ontario (including the future Northern Ontario Medical Education Centre). Among participants, 11 were from medicine, 11 from nursing, 7 from rehabilitation sciences, 5 from social work, 1 from pharmacy, and 1 from health administration.

All participants had an interest in IPE or were affiliated with the departments of family medicine at the universities. Before each focus group, written consent was obtained from each participant. Participation was voluntary. Explanations of audiotaping stressed anonymity and confidentiality. Two experienced facilitators used a semistructured interview guide to provide a consistent framework for each focus group. Field notes were used to capture observations and nonverbal information during the focus groups. Audiotapes of each focus group were transcribed and analyzed sequentially before the next focus group. The focus group guide was modified between sessions to concentrate on areas requiring further exploration. Each participant received a gift certificate as a token of appreciation.

All audiotapes were professionally transcribed. Using the grounded-theory method, the research team organized and analyzed the data in an inductive manner.[5] Each investigator independently analyzed transcribed data from the focus groups. Using the constant comparative method,[14-16] the research team derived, modified, refined, and agreed upon a coding scheme that captured major themes in the data. This inductive process ensured that findings were grounded in the data collected. The computer software program QSR NVivo was used to support nonnumerical unstructured data indexing.[17] Overall dominant themes were then identified.

The University Health Network Research Ethics Board, the University of Toronto, Queen's University, the University of Ottawa, Lakehead University, McMaster University, and the University of Western Ontario all granted ethics approval.

FINDINGS

Analysis of the data revealed 3 main themes: lack of understanding of IPE; lack of formalized IPE initiatives at higher education institutions; and lack of consensus on the idea that future academic FHTs could model and teach IPE.

Lack of understanding of IPE

Many participants believed that there was a lack of consensus on what IPE truly was. The lack of consensus was partly due to the ever-changing nature of knowledge: "I also think what complicates the whole situation is that each discipline evolves each year. So the disciplines are changing themselves." Lack of consensus continues because confusion remains over the definitions of such concepts as interprofessional, interdisciplinary, and multiprofessional.

> We talk about interprofessional education and professional practice, but sometimes it's not interprofessional, it's more multiprofessional. So I think our goal is interprofessional but we may not actually fully achieve that.

This in turn leads to a lack of understanding of how each discipline can contribute to collaboration in a meaningful way.

> [It's] not so much ignorance but a lack of education and knowledge on other health professionals' parts that may be a problem because it's not integrated in the academic level.... I wasn't taught about the absolute areas that OT covers or what exactly is the difference between an ophthalmologist and an optometrist.

Through this discussion we discovered that defining and understanding the role of each health professional was not something that came naturally. It had to be taught, and when it was not, there was confusion and discomfort when people tried to collaborate on initiatives and on patient care.

One participant said, "So there's really no forum set up for people to collaborate outside of just dealing with a patient that they have to talk about or dealing with research. It's almost like if you don't have the time...." Another participant commented, "It's quite clear that different professions have different domains of knowledge and different ways of organizing knowledge and different ways of approaching similar aspects of the same person."

In addition to requiring a working knowledge of role definition and understanding, health professionals need to learn how to work in collaborative practice. Participants in the focus groups discussed how health professionals from different disciplines were not going to be able to work with one another without a process that facilitates collaboration.

> So, we happen to be in the same room, here's the doctor, here's the social worker, figure out what they do. You can't just throw people together and say, Okay, figure it out, learn. You have to have some objectives and goals and move that forward.

Participants described a need for assistance in learning how to model interprofessional teaching, learning, and collaboration. There was a genuine desire to learn how to integrate better with each other and to understand the inner workings of a team.

> Our request was to actually train to be able to be IPE facilitators. I think we assumed that our experience is that many of us bring reasonably strong facilitation skills, but when you get into an IPE setting where there is a number of professionals and there's lots of conflict happening.... So those types of skills need to be there.

Participants believed that, if health professionals were going to be in an interprofessional setting, they would need to have faculty development training in the area of collaboration and facilitation. They suggested a "train the trainer" model as a way of training faculty and perpetuating those skills to everyone "on the ground."

Initiatives in IPE

Participants discussed how the culture of institutions in general played a role in willingness to foster IPE collaboration among various health disciplines. Some participants thought the universities were not facilitating IPE at the institution level or functioning interprofessionally at the teaching level.

> I think we're [educators] getting onto it [IPE learning] fairly slowly... there's been lots of angst in making some kind of IPE thing work.... I think universities are more built around silos. So we've got our social work silo, we've got these professional silos that at universities don't connect,... and I think that's part of university culture.

We found that each academic institution had its own organizational structures that either supported or discouraged IPE initiatives. Institutions that encompassed all health disciplines under one umbrella (eg, the faculty of health science included medicine, dentistry, and all other health professions) appeared to have more opportunities for IPE.

> In the medical education right from the get-go, they [students] are used to us [allied health professionals] being around and they are used to us contributing.... So there isn't the sense of marginalizing other professions.

Participants from institutions that had a split between medicine and all other health professions reported very few, if any, IPE initiatives. The following quote illustrates the desire for IPE initiatives from allied health professionals and the lack of response from medicine.

> I think that students pick this up from their faculty as well—the power, the lack of valuing of other people.... I think not just at the student level, they are also picking this up from what they are learning from their own medical professors.

Allied health professionals have often felt that, when they have been included, it was only to enrich the teaching of residents and medical school students.

> And I think that is a point to be made about interprofessional education. It is not about enriching medical education. It is about enriching everyone's education. This isn't just about having us as guest lecturers to enrich their education.... It has to be useful for all of those students, and they all have to feel respected because my experience is that when you get nursing students and physician students in a room, they sit differently and you can tell, you can cut the power with a knife in that room.... So just to put them in a room and say it is interprofessional education is not going to work.

All participants agreed, however, that for IPE opportunities to flourish, the involvement of medicine was essential.

> But we are talking here about a major shift in the working relationships between physicians and other disciplines. And coming from a nursing perspective, this is a 150-year-old problem. And there has to be a will on the part of medicine to give up power; it is not really giving up power, but that's the way they will see it. And if they don't want to do that, then interprofessional education is not going to work, even if you put all the disciplines in a room and you have all of these different disciplines teaching, it is still going to be us and them.

Some institutions have initiated interprofessional learning (doctors learning from nonphysicians), which was viewed as a positive move toward interprofessional ways of learning and modeling future practice.

> And so the students are used to learning from me, a non-doctor, and are becoming familiar with what social workers know and don't know. And so that is the beginning of their mind-set as they enter medicine. I think that is very powerful.

Family health teams

Most participants believed that FHTs had the potential to be excellent for teaching, learning, and modeling IPE initiatives and collaboration. They expressed caution, though, with respect to structures for decision making within these FHTs.

> I mean, from my perspective as a pharmacist, it is certainly an incredible opportunity for us to get more directly involved in patient care and certainly with collaborative practice. I think that ultimately it is going in the right direction. And I think there are going to be some problems, some turf stuff, you know,

> and ultimately who is the decision maker. But overall, I think each team... will evolve into finding their way to work together and I think that that is exciting.

There was concern regarding decision-making authority and how that would work in the new FHTs.

> I think that one of the things that is important in terms of the structuring is that the decisions need to be made by everyone and not just by the doctors. And if the decisions are just made by doctors then all we have done is create doctors' offices.

Participants were optimistic about teaching and learning interprofessionally by having FHTs in academic family medicine.

> Well I think that there is common ground where people can learn, and then there are specific medical pieces that can be taught to the residents by an interprofessional group as opposed to just a physician teaching them. So I think in terms of ... small-group learning, it should happen for all learners, not just for residents.

Participants stressed the need for support in the form of faculty development courses so that health professionals could learn how to work in FHTs. As one said, "We need courses on how to become a FHT." Another said, "We need supports in place to help FHTs... learn how to work together to create good models for trainees."

Our results indicated a lack of consensus about opportunities for future academic FHTs to teach IPE. There are opportunities, but they must be pursued with the appropriate vision so that they will include all health professionals.

DISCUSSION

There is a clear mandate federally and provincially to move IPE for collaborative patient-centred practice forward in Canada. The Health Council of Canada report[3] recognized that educating and training students collaboratively would be required to support a shift toward interprofessional teams in practices. In pursuit of improved quality and increased efficiency in health care, several reports and commissions have singled out FHTs as an important means of achieving better health outcomes.[3,4] Yet provincially, particularly in Ontario where FHTs are developing, it is not clear what role academic family medicine training has in preparing health professionals to practise in teams. Our findings illustrate that faculty might not be prepared to teach health professionals how to practise in FHTs.

First, IPE is not clearly defined, a fact that is evident in discussions about the importance of IPE for collaborative patient-centred care. There is still confusion between the concepts interprofessional and multiprofessional. "Multi" can refer to partners working independently toward a purpose.[18] Multidisciplinary or multiprofessional refers to teams where members function in parallel because they work relatively independently and have little communication among them. "Inter" is used to describe partnerships in which members from different professions, disciplines, modalities, and domains work collaboratively toward a common purpose.[19] Since IPE would help to generate effective collaborative practice,[3] attention will clearly need to be paid to this area as it develops.

Second, health professionals' roles and responsibilities in primary health care remain ambiguous. Interprofessional tension is a reality that stems in part from a lack of understanding of the roles and identities of the various health professions. Those who collaborate are often seeking role clarification with respect to boundary issues with a goal of ensuring that the most appropriate mix of providers is giving care. The medical profession has provided guidelines to its members to ensure that delegating an act does not compromise a doctor-patient relationship. It has further cautioned, "If medical acts become incorporated into the accepted scope of practice of other disciplines, the boundaries of medical practice may change."[20]

One of the challenges of interprofessional collaboration is ensuring clear definitions of providers' roles and expectations with regard to shared care. Defining roles and responsibilities will enhance the positive elements of collaborative interprofessional care and reduce misunderstandings regarding protocols, procedures, responsibilities, and authority.[19] Recognizing why these tensions exist and taking educational action to resolve conflict through teaching facilitation and teamwork skills can lead to improved collaboration. Issues related to sex, status, power, and authority and how these determinants affect collaboration need further consideration.

Third, IPE has not been formalized across professions. We found only limited initiatives and opportunities for health professionals to learn with and from each other in all higher education institutions in Ontario. Although some initiatives cited by participants attempted to engage learners in an interprofessional manner, these initiatives were neither formalized nor standardized. Health Canada[8] is leading the way with its Interprofessional Education for Collaborative Patient-Centred Practice initiative as part of the Pan-Canadian Health Human Resource Strategy. The strategy aims to support and facilitate training in this area across all health care sectors. To date, research conducted at the prelicensure level of training has lacked the rigour needed to give us an understanding of its effect on patient care.[21] Evidence does indicate, however, that

collaborative practice initiatives that occur at the postlicensure level of training improve quality of care and patient outcomes in specific populations.[22]

If interprofessional patient-centred collaborative practice is the vision of the future, then education and training for health professionals must reflect that vision. Not having a clear definition of IPE, not having standardized criteria for teaching IPE or collaboration across primary care health professions, and not having formalized educational initiatives have led to a lack of consensus on whether having academic FHTs is an effective way to provide IPE.

Conclusion

Educational leaders from the health professions need to come to a consensus on what role, if any, IPE should have in preparing health professionals to practise in FHTs in Ontario. As collaborative patient-centred care is both a federal and a provincial mandate, we suggest that leadership across the country is needed to move IPE forward in primary health care. The future role of academic family medicine training sites as places for all primary health care practitioners to learn needs to be carefully considered. It could offer a tremendous opportunity for academic family medicine training sites to teach a new generation of health care practitioners to work collaboratively.

Acknowledgment

This research was supported by a grant from the Primary Care Transition Fund in Ontario.

Contributors

Ms Soklaridis *contributed to concept and design of the study; data acquisition, analysis, and interpretation; and drafting and revising the manuscript.* **Dr Oandasan** *contributed to concept and design of the study and to critically revising the paper for important intellectual content.* **Ms Kimpton** *contributed to data acquisition, analysis, and interpretation and to critically revising the paper for important intellectual content. All the authors gave final approval to the manuscript submitted.*

Competing interests

None declared

Correspondence to: **Ms Sophie Soklaridis**, *Department of Family and Community Medicine, Toronto Western Hospital—University Health Network, 399 Bathurst St, 3W438, Toronto, ON M5T 2S8; telephone 416 603-5800, extension 3907; fax 416 603-5759*

References

1. Health Canada. *First Ministers' Accord on Health Care Renewal*. Ottawa, Ont: Health Canada; 2003.
2. Romanow RJ. *Building on values: the future of health care in Canada*. Saskatoon, Sask: Health Canada; 2002. p. 392.
3. Health Council of Canada. *An environmental scan of current views on health human resources in Canada: identified problems, proposed solutions and gap analysis*. Ottawa, Ont: Health Council of Canada; 2005.
4. Institute of Medicine. *Crossing the quality chasm: a new health system for the 21st century.* Washington, DC: National Academy Press; 2001.
5. Way DO, Busing N, Jones L. *Implementing strategies: collaboration in primary care—family doctors and nurse practitioners delivering shared care.* Toronto, Ont: Ontario College of Family Physicians; 2002.
6. D'Amour D, Oandasan I. Interprofessionality as the field of interprofessional practice and interprofessional education: an emerging concept. *J Interprof Care* 2005;8(Suppl 1):8-20.
7. Centre for the Advancement of Interprofessional Education. *Interprofessional education: a definition for health and social care.* London, Engl: Centre for the Advancement of Interprofessional Education; 1997.
8. Health Canada. *Interprofessional education for collaborative patient-centred practice*. Ottawa, Ont: Health Canada; 2004.
9. Ontario Ministry of Health and Long Term Care. *McGuinty government expanding "team approach" to education for health professionals.* Toronto, Ont: Ontario Ministry of Health and Long Term Care; 2006. Available at: **http://www.health.gov.on.ca/english/media/news_releases/archives/nr_06/jun/nr_061406.html**. Accessed 2007 March 16.
10. Ministry of Health and Long Term Care. *Family health teams: guide to collaborative team practice.* Toronto, Ont: Ontario Ministry of Health and Long Term Care; 2005.
11. Oandasan I, Reeves S. Key elements for interprofessional education. Part 1: the learner, the educator and the learning context. *J Interprof Care* 2005;19(Suppl 1):21-38.
12. Steinert Y. Learning together to teach together: interprofessional education and faculty development. *J Interprof Care* 2005;19(Suppl 1):60-75.
13. Strauss AL, Corbin JM. *Basics of qualitative research: techniques and procedures for developing grounded theory*. 2nd ed. Thousand Oaks, Calif: Sage Publications; 1998.
14. Glaser BG, Strauss AL. *The discovery of grounded theory: strategies for qualitative research*. Chicago, Ill: Aldine; 1967.
15. Lincoln YS, Guba EG. *Naturalistic inquiry*. Beverly Hills, Calif: Sage Publications; 1985.
16. Creswell JW. *Qualitative inquiry and research design: choosing among five traditions.* Thousand Oaks, Calif: Sage Publications; 1998.
17. Bazeley P, Richards L. *The NVivo qualitative project book*. London: Sage Publications Inc; 2000.
18. MacIntosh J, McCormack D. Partnerships identified within primary health care literature. *Int J Nurs Stud* 2001;38(5):547-55.
19. Paul S, Peterson CQ. Interprofessional collaboration: issues for practice and research. *Occup Ther Health Care* 2001;15(3/4):1-12.
20. College of Physicians and Surgeons of British Columbia. *Delegation of a medical act*. Vancouver, BC: College of Physicians and Surgeons of British Columbia; 2007. Available at: **https://www.cpsbc.ca/cps/physician_resources/publications/resource_manual/delegationmedicalact.** Accessed 2007 March 26.
21. Paquette-Warren J, Vingilis E, Greenslade J, Newnam S. *Summary report of the process of evaluation of the Hamilton HSO Mental Health and Nutrition Program.* London, Ont: University of Western Ontario; 2004.
22. Zwarenstein M, Reeves S, Perrier L. Effectiveness of pre-licensure interprofessional education and post-licensure collaborative interventions. *J Interprof Care* 2005;19(Suppl 1):148-65.