Journal of Interprofessional Care,
June 2005; 19(3): 207–214

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Interprofessional care review with medical residents: Lessons learned, tensions aired – A pilot study

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Abstract
Integrated interprofessional care teams are the focus of Canadian and American recommendations about the future of health care. Keeping with this, a family medicine teaching site developed an educational initiative to expose trainees to interprofessional care processes and learning (Interprofessional Care Review; IPC). A formative evaluation pilot study was completed using one-on-one interviews and a focus group ($n = 6$) with family medicine residents. A semi-structured guide was utilized regarding: knowledge, skills and attitudes related to interprofessional care; their experience of the processes utilized in IPC. Data were analyzed using content analysis. Residents' perspectives on their learning revolved around four themes: changes to understanding and practice of interprofessional care; personal impact of IPC; learning about other health professionals; tension and challenges of IPC learning and clinical implementation. Residents valued the educational experience, but identified that faculty supervisors provided "mixed messages" in the value of collaborating with other health professionals. Implications regarding future educational and research opportunities are discussed.

Keywords: *Internship and residency, interprofessional education, medical education, post-licensure, qualitative research.*

Background

In its July 2001 document entitled *Primary Care and Family Medicine in Canada: A Prescription of Renewal*, the College of Family Physicians of Canada called for the establishment of Family Practice Networks (FPNs) throughout Canada (The College of Family Physicians of Canada, 2000). The College recommended that family physicians, nurses and health professionals in Canada be encouraged and supported to join FPNs, and further, that integrated interprofessional care teams be established within each FPN. In the United States, the Institute of Medicine's *Crossing the Quality Chasm* (Institute of Medicine Committee on Quality of Health Care in America, 2001) report called for new or enhanced skills required of health professionals in order to function in the changing health care environment. One such skill identified was the ability to work in interprofessional teams (Institute of Medicine Committee on Quality of Health Care in America, 2001). Interprofessional teams have members working closely and communicating frequently, centred around patient problems in order to optimize patient care (Hall & Weaver, 2001).

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ISSN 1356-1820 print/ISSN 1469-9567 online © 2005 Taylor & Francis Group Ltd
DOI: 10.1080/13561820500138693

Interprofessional care review

In keeping with this goal, the Family Health Centre (FHC) at University Health Network-Toronto Western Hospital (UHN-TWH; a teaching site of the University of Toronto's Department of Family and Community Medicine), wanted to give its trainees exposure to interprofessional care. Transforming the current FHC from a practice that is multi-disciplinary to one that is interprofessional is a complex task. In order to begin this change process, we determined that a pilot educational experience aimed at learners would be a constructive starting place, rather than aiming to undertake a practice wide transformation. Thus, the Interprofessional Patient Care Review (IPC) was initiated.

The development of this initiative included assembling an IPC facilitation team. Initially the team consisted of a social worker, family physician and pharmacist. After initial sessions were held where staff physicians were invited to present complex patients to the IPC facilitation team, it was recognized there were other health professionals that should be on the facilitation team. Thus, a nurse and nurse practitioner were invited to participate.

Although staff physicians found it challenging to find the time to present cases to the facilitation team, the feedback was that the care reviews and management plans developed by the team were indeed valuable. Hence, a decision was made to provide the family medicine resident trainees with exposure to and experience in participating in interprofessional practice through the Care Review process.

The educational intervention commenced in 2003, occurring twice monthly. The goal of IPC Review is to adapt the traditional chart review learning process to include input and learning opportunities generated by – and with – various members of the FHC health care provider team: nurse, nurse practitioner, social worker, family physician and pharmacist. Traditionally, family medicine residents meet with their supervising physician at the end of a morning or afternoon clinic and review their patient charts, and learning is provided through the facilitation of the staff physician with the family medicine residents.

Chart review is an educational strategy that has promise to enhance learning related to collaborative practice for patient centred care. It addresses many of the tenets of adult education theory, or "adrogogy" (Knowles, 1980) such as "learner self concept" – that adults need to be responsible for their own decisions; that adult learners want to solve problems and apply new knowledge immediately; and that the learning environment is a co-operative one. Chart review is also a good example of problem-based learning (Barrows & Tamblin, 1980), using real patient cases to create management plans. While IPC Care Review is not a novel intervention, it is one that is often used in medical education at the primary care setting. It can be easily amended to include an interprofessional focus. Thus, the authors value it as a practical teaching tool.

The goal of IPC care review was to provide a more comprehensive management approach to patient care by developing an integrated interprofessional care plan. Further, there are objectives that stem from this goal:

- Use interprofessional resources to fully understand patient issues and develop comprehensive management approaches to the delivery of patient care.
- Enhance interprofessional practice by using collaborative and group decision-making strategies in the delivery of patient-centred, family focused, community-oriented health care services.

After IPC had run for 10 months, a formative evaluation was planned to comprehend the residents' experiences in this process, as well as their self-identified learning and lessons.

Evaluation methods

In September 2003, this evaluation was initiated. The ten family medicine residents (trainees) who participated in IPC care review were contacted. Individual interviews occurred with two trainees, followed by a focus group with another four. The individual interviews were held because they could not attend the focus group. Thus, six of the ten residents participated in the feedback sessions. The demographic composition of the six trainees was: three female, three male; three first year family residents, two second year, and one third-year resident. The interviews and focus group were between 40 – 60 minutes in length.

It was explained to the trainees that feedback was being sought from them regarding IPC. A semi-structured oral questioning guide was utilized in order to facilitate discussion. Trainees were asked about: their developmental understanding of interprofessional care; the impact of IPC on their learning and clinical work; their experience of the processes of the IPC sessions; their positive and negative comments regarding IPC; the group's communication; the processes that helped and hindered their experiences and subsequent learning implementation; and the advantages and disadvantages of working in an interprofessional fashion. The sessions were audio-taped, and notes were taken. Verbal consent to audio-tape was obtained.

The initiative was implemented as an element of a quality initiative on the part of the IPC facilitation team. Thus, formal research ethics approval was not obtained, because it was intended that the results would be utilized to enhance and evaluate the program from this quality paradigm. However, because interesting and intriguing findings were discovered, it was determined they should be disseminated to a larger population via publication. Hence, participants'consent to publish the results was obtained, by using a consent form in line with procedures outlined in Research Ethics Board guidelines (University Health Network; Toronto, Ontario).

Data analysis

The interviewer (KB) took detailed notes during both the individual and group sessions which formed the basis for the data. During the questioning, she summarized the main issues the learners identified and orally presented them back to the participants to gain feedback about the accuracy of her understanding. During the group session, the field notes were displayed as they were being recorded via the use of an overhead projector, which provided opportunity for participants to question the researcher's understanding.

The field notes were transcribed into long format, with additions made for clarification and information. These field notes were emailed to session participants, requesting they review them for accuracy. No subsequent changes were made to the notes based on this member-checking. The notes were then analyzed by KB in order to generate larger thematic categories based on the information collected. Because the sample size was small and the sessions limited, saturation of data is by no means present. Knowing saturation could not be met, grounded theory was not utilized and as such, a content analysis was performed to arrive at the general ideas the participants presented.

Results

The trainees reported four main themes regarding IPC:

- Changes in the understanding and practice of interprofessional care

- The personal impact of IPC
- Learning about other health professionals
- Tension and challenges of IPC learning and clinical implementation.

It is important to note that the results were obtained through a qualitative content analysis, and reflect both points of consensus for the group, as well as individual understandings. The results presented are summative in nature, as the source of the data were the field notes (vs. long quotations that can be derived from in-depth interview transcripts). Italics with quotes indicate words used by residents.

Changes in understanding and practice

The residents did not report any changes to their understanding of the concept of interprofessional care. They defined interprofessional care as: a situation where "*More than one person is involved in the patient's care*"; or a team that addresses aspects of healthcare between different professionals. They communicated that interprofessional care is different than usual care because it is about professionals trying to come together to provide the best care for patients – either independently working, or convening to discuss patients/patient issues. They also reported that there is an ideal IPC patient as a complex patient who has multiple issues: multiple medications, multiple diagnoses/medical concerns, psychosocial issues, older patients, patients who are isolated or who have limited finances, and social support.

A change in practice as a result of IPC involvement was reported by most of the residents. They stated that in practice they do things like discuss with patients more frequently potential services and resources, and they implemented the care plans developed in IPC. Some reported that they are more likely to ask questions of patients that are specific and fine tuned – questions they may not have thought of on their own without IPC involvement. They also reported they aim to collect more information from patients: they try to be more inquisitive, and they don't take things at "*face value*" – they probe for more information from patients.

Personal impact

The residents reported various personal impacts as a result of IPC involvement. For instance, one trainee reported she learned that help exists, and that "*I don't have to be alone to figure this out*". Additionally, she learned she did not have to address all of her patients' problems at once, but what she did need to do was "*think about where I fit in? Where will I start?*". Others learned that "*I can connect with information*". Throughout the IPC process, residents became more familiar with the IPC faculty members, and were thus more willing and comfortable in approaching them for help and input. They reported confidence that the IPC team "*can help me*" with patients' care.

Learning about other health professionals

Regarding Family Health Centre Health Professionals (FHCHPs), residents reported they received encouragement from them, and they learned more about FHCHP professional roles. Encouragement received was both to consult with FHCHPs, and to participate in self-directed learning (e.g., one FHCHP suggested an article in a journal affiliated with her discipline about which a resident did not know). The residents reported that FHCHPs were happy to help them learn.

Regarding FHCHP roles, the students spoke highly of the different health professionals, considering each as experts in their fields. This expertise helped the residents with "*things you've overlooked*" in patient care. While they did not report changes to their conceptual understanding of interprofessional care (as outlined above), they did report a firmer grasp and understanding of what FHCHPs professionals *actually do* in their professions, as well as what they *can and are able to do*. The residents reported that before IPC, their understanding of FHCHPS's roles and scopes of practice was narrower. They also learned that "*other people have ideas that I'm not aware of*". The residents reported that IPC assisted them in bringing the perspectives of other health care professionals into the limelight, because as residents, "*we think about things in one way*". One resident also made a simple, yet profound statement when she reported that other health care professionals "*help patients just as much as doctors*". Some of the others also reported an appreciation for other health care professionals and what they bring to patient care.

Some residents remarked on the timeliness of this understanding, for they reflected that they believed the clinic staff physicians have knowledge of other health professionals' roles, but as residents this knowledge is not present. The reason cited was having felt too overloaded in medical school to absorb any of the learning regarding other health care providers' roles. They reflected they now have (or are supposed to have) a stronger grasp of what they do (medicine), so they are able to learn about what other health care providers do in their work.

Tension: Referrals and roles

It was here that the residents began to make interesting and thought-provoking remarks on their observations of physician and health provider roles. Some residents noted that older physicians in the clinic at times communicated (for example) an anti-physiotherapy sentiment, because they thought "*we [doctors] can do that*". The residents reported that it was different in IPC review because there was a more open use of resources. They reflected that the "old-school" approach was characterized by doctors at the core, or the center, of patient care. However, they reported that currently, since FHCHPs have such specific training, there was "*no way for physicians to have all the knowledge*". In IPC they felt more encouraged to draw on FHCHPs: one resident reported she learned that doing so did not mean "*surrendering your patient*".

Some reported feeling more comfortable in referral situations where they did not have a lot of knowledge, for they could refer "*to people who do know things – if we didn't have them available, it would be incumbent for me to do*". A different experience was encountered outside of IPC when they described the previously illustrated "we can do that" mentality that existed in some experiences in the FHC. Related, some observed that the doctors help the nurse practitioners (NPs) with patients but that NPs do not do the same with the doctors. One resident wondered if this was because of "*surrendering*": that a resident might be seen by others as "*shrugging*" her duties if she refers her patient to an NP.

The "*shrugging*" discussion led to questions that existed for the residents of when it is appropriate to refer. They reported this question exists because making referrals can make residents feel as if "*you are being lazy*", or they may feel "*guilty*" making referrals – especially in a non-IPC setting. This "laziness" and "guilt" experience arose because situations where the resident believed referral may be an option were often framed by teachers as learning opportunities. Some residents stated they had experienced a situation where they thought they should refer to another health professional, and the response from teachers was "*why don't you do it?*". The residents understood that this question was posed because the

situation was regarded as a "learning opportunity", one they would be turning away from if they pursued the referral. The residents reflected that "*there is a fine line – do I do it myself or do I refer?*".

Discussion

This study's intervention – though brief – was able to instigate change in family medicine residents around interprofessional knowledge, attitudes, and behaviors. Trainees' gained *knowledge* in that they more fully understood other health professionals' roles, as evidenced in their observations that before undertaking IPC their views of other health care providers were far narrower. In addition, there were subsequent *behavior* changes, for example trainees reported they considered viewpoints outside their own when conducting patient care. This consideration of viewpoints tended to both broaden their practice (e.g., telling patients about community resources), and deepen their patient inquiries (e.g., asking targeted and specific clinical inquiry questions). *Attitude* change occurred in that trainees reported an appreciation for what other health care providers do, and that those care providers equal physicians in their capacity to help patients.

Literature suggests that knowledge of professional roles is an essential component in any interprofessional education (IPE) initiative (Barr, 1998; Hall & Weaver, 2001; Oandasan & Reeves, 2005). Literature also suggests that understanding professional roles is necessary in order to establish collaborative practice (Alpert, Goldman, Kilroy, & Pike, 1992; Bradford, 1989; Fagin, 1992; Reese & Sontag, 2001). The two broad concepts of interprofessional education and collaborative practice share not only this mutual appreciation for the importance of role understanding, but the two broad concepts themselves are intimately linked in the literature: interprofessional education is interdependent with collaborative practice (D'Amour & Oandasan, 2005). Thus, the achieved role understanding reported above can be situated in the larger context of teaching health professional students about interprofessionalism as a means to achieve collaborative practice. The use of IPC care review lead to knowledge and attitude shifts that theory would suggest impacts trainee's practice patterns toward becoming more collaborative. This theoretical proposition was found to be the case in that the attitude and knowledge shifts were accompanied by trainees changing practice behavior. However, because this is not a controlled quantitative exploration, and it is a pilot study describing one case, statements of causation are not founded. Here lies an opportunity for future research.

Trainees also reported personal development, in that they learned that they are not alone in the care process (they learned they could connect with information and that there were other care providers available to work with them to provide patient care). Trainees reported a sense of comfort in knowing they did not have to take care of all the patient's needs at once. The comfort described here contrasts the burnout experience of many care providers in a time of cutbacks and increasing workloads. D'Amour and Oandasan (2005) draw a theoretical link between collaborative practice and worker satisfaction, and as is evidenced in the trainee experience outlined here, this link seems to hold true.

Even though trainees reported such shifts in knowledge, attitudes and behaviors, they also described tension when implementing their behavior changes. Trainees identified experiencing tension when attempting to refer to other care providers outside of IPC scenario (i.e., "we can do that"). It is possible that such tension existed because of the supervising faculty's belief that the family physician is a comprehensive care provider, a belief that can contrast to the notion of interprofessional practice: if the family physician is

supposed to be comprehensive, how then do they integrate the expertise of other care providers without compromising their own contributions?

The trainees' experience of referral tension highlights the need for faculty development initiatives in interprofessional education and collaborative practice, for the perceived status or importance of interprofessional education can be negatively affected if faculty do not "walk the talk"(Lingard, Reznick, DeVito, & Espin, 2002). Faculty play a key role in role modeling for trainees, and trainees may mimic faculty beliefs and discourse in order to communicate community membership (Lingard et al., 2002). Faculty need to be mindful that they are influencing trainees attitudes toward other care providers – lack of understanding, respect or appreciation of the contribution of other professionals is a barrier to collaboration between health care professionals (Bradford, 1989; Stichler, 1995), and these attitudes may be passed on to future practitioners. The transference of attitude is reflected in other research, such as an examination of the values taught to learners in internal medicine. Stern (1998) found that despite curricular recommendations to teach interprofessional respect, faculty actually taught interprofessional disrespect. He concludes that while he doubts this is intentional (for faculty may not recognize messages they send to learners), nevertheless, students are not learning intended norms because they do not receive consistent messages about the values they are supposed to espouse.

Faculty need to be actively encouraged to reflect upon their own beliefs and attitudes toward health providers, interprofessional education, and collaborative practice because without such active encouragement, they may be unwilling to both change their own attitudes and learn different ways of practicing and teaching that may be more conducive to IPE (Parsell & Bligh, 1998). This suggests the need for the development and implementation of faculty development projects to assist faculty in examining and modifying their own stereotypes and attitudes toward health care providers.

Conclusion

The current initiative was implemented as a "starting point" in the goal of transforming a multidisciplinary practice to one that is interprofessional, and we learned that the IPC Chart review can increase knowledge of other health care providers and impact change in behavior and attitudes. However, key to the future success of any educational initiative is a consideration of both the impact of the teaching faculty who interact with trainees outside of the IPC setting, and the existing multidisciplinary approach to care that exists in the centre. We know it is not enough to create pockets of interprofessional/collaborative practice, for malleable trainees who are in positions of being evaluated by faculty cannot be expected to change and challenge faculty attitudes and stereotypes. If we desire interprofessional working relationships and collaborative practices, we must take responsibility of helping our own faculty members to understand these concepts, and shift any negative preconceptions or sense of threat. The changes that are required are beyond those that can be affected by any one initiative, for they are cultural changes. Such cultural shifts cannot occur without addressing the norms and values of its leaders: family medicine faculty members. These cultural leaders deserve the opportunity to learn about themselves, about other practitioners, and about other cultures of care-provision in order to create a collaborative care community.

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