The experiences of administrators, educators and clinicians during the development and implementation of interprofessional clinical learning units

M. Hall¹, J. Van der Zalm²& S. Patterson³

Abstract

Introduction: Interprofessional and collaborative practice is essential for effective patient care in new and evolving healthcare service delivery models. Traditionally, interprofessional clinical learning has focused on students and clinicians, however healthcare administrators and managers may play a key role in the success of interprofessional clinical learning. In this paper, the triumphs and trials of those engaged in the interprofessional clinical learning unit (IPCLU) conceptualisation, development and implementation are presented.

Methods: Over 60 executives, directors, frontline managers, educators, researchers and staff participated in the development and initiation of an IPLCU in three distinct clinical settings in Alberta: tertiary rehabilitation, acute care and continuing care. Focus groups were used to explore participants' experiences of developing, initiating and implementing an IPLCU.

Results: A qualitative analysis revealed the following predominant themes that describe significant outcomes or considerations: pre-IPCLU challenges, team dynamics, student experiences, cultural changes, sustainability and leadership.

Correspondence Mark Hall, PT, PhD, Associate Professor and Associate Chair Department of Physical Therapy Faculty of Rehabilitation Medicine University of Alberta Edmonton, AB, T6G 2G4 Canada Tel: +1 780 492 3997 Email: Mark.Hall@ualberta.ca

¹ Associate Professor and Associate Chair, Department of Physical Therapy, Faculty of Rehabilitation Medicine, University of Alberta, Edmonton

² Performance Consultant, Glenrose Rehabilitation Hospital, Alberta Health Services and Instructor, Bachelor of Science in Nursing Program, MacEwan University, Edmonton

³ Associate Chair, School of Dentistry, Faculty of Medicine and Dentistry, University of Alberta, Edmonton

Conclusions: Successful implementation of IPCLUs can be achieved with participation and leadership from clinicians and educators and the support of administration at both the academic institution and the healthcare agency.

Keywords: interprofessional relations; health personnel; learning; faculty; focus groups.

Introduction

Interprofessional and collaborative practice is essential for effective patient care in new and evolving healthcare service delivery models (Frenk et al., 2010; WHO, 2010). As a result, healthcare organisations seek ways to prepare and support clinicians to work in interprofessional (IP) environments. For health professionals to work effectively and collaboratively with other disciplines and provide competent healthcare delivery, appropriate training is necessary (WHO, 2010); however, the promotion of effective interprofessional education (IPE) and practice within the healthcare setting is rare (Davidson & Waddell, 2005). For most health science students, clinical learning is discipline-based, with minimal opportunity for IP experiences, and the spread of innovation in IPE can be retarded by unidisciplinary communities of practice (Ferlie, Fitzgerald, Wood, & Hawkins, 2006). Although faculty perceptions towards IPE and teamwork are favourable, significant barriers, such as academic schedules, rigid curricula, interdisciplinary turf battles and lack of perceived value on the part of educators and students, still exist (Curran, Deacon, & Fleet, 2005; Gilbert, 2005).

Clinical learning units (CLUs), also known as collaborative academic teaching units, have been launched to address the educational needs of nursing and other health sciences students in several settings (Budgen & Gamroth, 2008). Generally, these units are discipline specific; however, recently, attempts have been made to create an IP model where students and staff from multiple disciplines work and learn collaboratively in clinical settings (Ericson, Masiello, & Bolinder, 2012; Jacobsen, Fink, Marcussen, Larsen, & Hansen, 2009; Morphet et al., 2014). Interprofessional education has traditionally focused on student and faculty perspectives; however, some argue that managers and administrators play a key role, supporting IP education and practice (Begun, White, & Mosser, 2011; Dopson & Fitzgerald, 2006). Therefore, we were intentional about including healthcare managers and administrators from both the healthcare agencies and the academic institution in our study in order to gain that perspective.

Health science faculties and provincial healthcare providers in Edmonton, Alberta, collaborated to develop a new IP model of clinical education and patient care. Academics, clinicians and health facility administrators collaborated from the start to design and implement a new model of IP clinical learning that was modelled on educational principles taught in class but was also receptive to changes and feedback from frontline staff as the project progressed. Building on experiences from a nursing CLU project, strategies were proposed that would enhance clinical IPE opportunities and care environments. Specifically, interprofessional clinical learning units (IPCLUs) were

developed and implemented in three distinct clinical settings: tertiary rehabilitation, acute care and continuing care. The intention of this project was to develop viable IPCLU models and implementation strategies for each of these contexts.

This IPCLU project's uniqueness relates to the collaborative, participatory action approach of the education and healthcare organisations, both at administrative and frontline levels, in designing and implementing IP education and care. The educational component focused on students, but benefits and learning also occurred for workers in the IPCLU. This was designed as a clinical, practicum learning experience as opposed to a simulated experience or academic course in which collaborative practice and team-based care are taught. The teaching unit was modelled on best practice and the university's interprofessional learning pathway competency framework (University of Alberta, n.d.) was used as a guide.

Pre-implementation data from students, faculty and patient-care providers was collected from each site and was utilised by working groups to develop specific plans for implementing their IPCLU. Following implementation of the site-specific IPCLU model on each unit, post-implementation surveys and key informant interviews were completed. Within weeks of post-implementation survey administration and interview completion, and following data analysis, focus groups were conducted with members of the project's steering committee, research team and working groups. The IPCLU site specific data are reported elsewhere (Sommerfeldt, Barton, Stayko, Patterson, & Pimlott, 2011; Vanderzalm, Hall, McFarlane, Rutherford, & Patterson, 2013). Findings specifically from the post-implementation focus group sessions are the focus of this paper. Lessons learned can be utilised by others seeking to foster and strengthen IP healthcare environments.

Methods

Feedback on the processes of developing and implementing IPCLUs was obtained from stakeholders and representative members of each project's steering committee, research team and working groups using a semi-structured interview guide. The steering committee included senior administrators from participating healthcare facilities and faculties at the University of Alberta (U of A). The research team comprised faculty members from each of the participating faculties at U of A, in addition to administrators and managers from each of the three healthcare facilities (acute care, tertiary rehabilitation and continuing care). Each site had a working group comprising frontline clinicians from each IPCLU, unit managers, nurse educators and faculty members.

Two focus groups were conducted. One focus group included representative frontline clinicians and unit managers of the working groups from each site (FG1). The second focus group comprised representative members of the steering committee and research team (FG2). Information and recruitment letters were emailed to all members of the steering committee, research team and working groups requesting participation in focus groups.

A semi-structured interview tool guided the direction of the focus groups. Focus group questions related to a) participants' experiences prior to and after IPCLU implementation, b) facilitators of and barriers to IPCLU implementation, c) benefits and drawbacks of the IPCLU and d) transferability and sustainability of the IPCLU. Sessions lasted approximately 1 hour and were audio recorded and transcribed verbatim. The FG1 data was analysed by five research team members and the FG2 data was analysed by six research team members.

Data was coded thematically and emergent themes were identified by each reviewer (Braun & Clarke, 2006). No predetermined codes were used in the analysis. After each research team member had reviewed, coded and themed the data, the research team met to discuss the individual themes and reach consensus on the overarching themes.

Ethics approval was granted by the Health Research Ethics Board of the University of Alberta.

Findings

Common themes arising from focus group data include: Pre-IPCLU challenges and attitudes, team dynamics, student experiences, cultural changes, leadership and sustainability.

Pre-IPCLU challenges and attitudes

Steering committee and research team members agreed that prior to implementation, the IP-focus challenged students, teachers and clinical team members. As members of committees met to discuss the manner in which the clinical learning unit could be implemented in their particular setting, a *historical perceived separation of learning and practice* was noted by one steering committee member:

Prior to the project (from our perspective anyway), students were very much often a "one off" ... they were often by themselves or in very small groups, and it was hard to give them enough time and enough resources to really feel part of the team or to interact with other students. (SC1)

Another challenge during pre-implementation was the disconnect between current clinical practice and available literature reporting successful interprofessional learning environments:

As I looked at the literature, much of what was being said was all of the problems about how it's so hard to do—the barriers—not a lot about how do you actually do it? How do you make it happen? (RT1)

During initiation of the project, focus group participants perceived little understanding and agreement from the participating disciplines about the concepts of interprofessional education and care, and thus little understanding or agreement about what the focus or outcome(s) of the project might be. One research team member noted:

Even when you talk about interprofessional care, interprofessional learning and so on, in reality in the clinical areas, prior to this project, people didn't understand anything about that term. They thought they did, but they didn't really understand what that term was and to go even further, they didn't understand the role of the person that they were working alongside, if that person belonged to a different discipline. (RT2)

For frontline working group members, challenges included information system delays with installation of computer and printers for the designated clinical learning spaces, demanding and conflicting meeting schedules, competing priorities and the addition of a process-orientated, unit-based project to existing workloads. One working group member felt that, even with academic supports, instructor awareness of IP environments was an issue:

The students have really opened up but I think the instructors are still a little bit ... am I wrong ... a little bit siloed still. (WGA1)

Team dynamics

The interconnections between the steering committee, research team and working groups contributed significantly to the successful establishment of the IPCLU. Representatives from the research team were on the steering committee and each of the working groups.

It just kept the connection between all three levels of the project together and it didn't rely on one person or a couple of people to deal with all of it. (RT1)

Within the various committees and working groups, individual and team roles were established with the aim of advancing the project. Individuals on more than one committee or group felt they were contributing to this goal:

Having someone in my position who can bridge that gap and speak with a working group about how the project and research gets linked together is more likely to lead to this research being put into practice and spreading through some of the other areas that were not specifically targeted for the project. (RT4)

Additionally, broad representation from different disciplines on the committees "lent itself to the model of walking the talk" (RT1).

Student experiences

Overall, working group members felt student experiences were enhanced by the IPCLU environment. Students became "higher profile" on the team even though they had been a part of the team for many years. Working group members also felt students had often been isolated within their own disciplines. In the IPCLU, students had an "acknowledged role, respect and importance" (WGB1) that had been missing previously. To highlight the presence of students, their discipline and their identity, IPCLU staff at each of the three sites developed individualised methods of identifying and highlighting students from all disciplines in one unit location (e.g., poster boards with student pictures). By placing emphasis on the collaborative team environment, students became an integrated part of the IP team:

We've been working as an interprofessional team for years. The piece that was probably missing is the integration of the students into the team. They quite often were isolated within their own disciplines. I think that by making them more visible, that was our goal. And to incorporate their learning within all disciplines, not just our own. (WGB1)

As the student role and value was highlighted within the team, working group members felt students were more willing to integrate into the team, and "felt freer to communicate and express their feelings, thoughts, and their experiences" (WGA1) to others in the team, both students and staff. One working group member expressed:

I think the importance of developing a sense of community has been lost somewhat. Trying to bring it back and let staff know how important it is to take a student under their wing and share with them and help them—this has just been a boost to remind us that this needs to happen, and the students are our future. (WGC1)

Staff-student communication and interaction were positively affected by the IPCLU environment. As students realised their role on the IP team, they took an active role in interacting with other students and team members outside of their own discipline. Students began to "talk more about the interprofessional team and not just the [disciplinary] skills they are trying to acquire" (WGB1). One working group member noted students were learning *how* to interact with team members and *how* to work together within an environment where each student was accepted.

Cultural changes & benefits

Quoting a unit educator, a research team member said:

"Oh, we already do this so why are we doing this?" And then once they started doing IP care, it was, "Oh, well maybe there are possibilities here." (RT2)

Although many working group participants felt that they had been practicing interprofessionally, involvement in the development of the IPCLU forced them to question that premise and come to the realisation that perhaps they had not been practicing interprofessionally after all:

I think the biggest challenge for us was getting the interprofessional team to realise that there was still work to be done, because they felt that they were doing it already ... What else could we be doing to enhance the student experience and incorporate them into the team? And once they got over that, they could see the benefits of making the changes that we [the working group] proposed. (WGA1)

Once participants engaged with the process of designing an IPCLU that "fit" their clinical area, they realised the inherent advantages of being a part of a change such as this:

Something like this forces you to look at how you feel about being uncertain and how you feel about being out of your comfort zone, because certainly at our site anyway, we had no idea how this was actually going to be operationalised and what it was going to look like in the end. Just being able to give up that control and be happy with the result ... (RT2)

The *process* of developing the IPCLU was as important, if not more important, than the tangible outcomes for participants, who felt that building an IPCLU was really "a very gradual learning and shaping ... about building a new culture" (RT3). Each of the three units designed distinctly different IPCLUs that met their specific IP learning needs. Working group and research team members felt all of the units experienced "a sort of transformation in some ways, dealing with something that was not very distinct initially" (RT1). Active participation transformed both the learning and culture of the units:

You learn by being part of something that deepens how you think, and I take back some of the things, and I heard the way things were phrased in the working group, and I started thinking about things in my own mind quite differently. So it felt like real life to me. It felt like an opportunity to just take it and go wherever it was headed. It felt like a real experience rather than just a task. (RT3)

Participants also noticed changes in their own attitudes and perceptions, as well as those of their colleagues, as the project progressed and as the unit and the unit-processes began to take shape. A steering committee member commented:

I do believe as people began to work through the process and see it unfold, they did become more excited about potential going forward. ... I think certainly that is what has evolved, and I hear very good things back as a member of the student committee from the front-line people who accessed the learning unit and been part of the development. (SC1)

Leadership

Participants tended to differentiate between "leadership" and "management" when speaking of the IPCLU. Leadership referred to the roles and functions of the research team, project coordinator and research assistant, while the "manager" of the IPCLU was a collaborative participant in the working group and responsible for ongoing faceto-face support and facilitation of the IPCLU concept on the frontline. "Leadership" provided education, direction and guidance to the project as a whole, with the aim of supporting and informing the entire IP team. Participants felt that leadership roles and functions fell beyond the role of a busy frontline manager. In the focus group, the roles of project coordinator and project assistant were felt to be critical, as "the project was huge and would be incredibly difficult to manage and accomplish and move forward without the kind of assistance that we were able to have" (RT2).

Sustainability

Steering committee and research team participants felt the sustainability of the IPCLU learning environment, and the "spread" of the concept to other units, was extremely dependent on partnerships between academia and clinical practice, as well as the commitment, support and promotion from the executive level of the participating sites:

This is a model of partnership, and I think if we take out that piece then we lose something and then the spread will be limited. It's in that partnership model that we have the impact that we actually want in spreading it from unit to unit to unit and

also from discipline to discipline to discipline. And in the bigger picture, [spreading] from academia to operations and so on. I think if we don't have that partnership from everyone and that buy-in from everyone at the larger level, then I don't think it will be successful. (RT2)

Frontline working group participants believed the sustainability of the IPCLU was dependent upon strong leaders with facilitation and mentorship skills who could get buy-in from the IP team. Financial resource allocation for IPE, such as administrative assistance and/or release of time for meetings, as well as providing education about the IPCLU concept, was seen as critical to sustainability. One working group participant noted:

Sustainability is difficult. We would need to maintain a vision and culture which is being eroded by lack of protected time and resources, and staff turnover in a demanding work environment. (WGC2)

Discussion

Implementing change of any kind can be challenging; one key feature that led to success in this project was engagement. The process of consultation, collaboration and inclusivity at all stages and all levels of the project, from agency administrators to frontline staff, led to a successful implementation of IPCLUs on each of the respective units. From the outset, frontline staff, academics and administrators were involved in both identifying site specific challenges related to IPE and developing a process to mitigate those challenges and enhance IP learning and practice on each unit.

Effective leadership and project management were crucial in advancing this study and implementing change. The project manager, someone other than a busy unit manager, was given the task of coordinating the project, arranging meetings, ensuring equipment arrived on time and generating correspondence and promotional material. We believe that the success of this project was due, in part, to the presence of a designated project manager who was not an already busy staff member who may have viewed the project as an add-on to existing responsibilities. This role was augmented by strong support from healthcare agency administration and management who were involved in the project through regular steering committee meetings.

Our findings echo those of Newton, Davidson, Halcomb and Denniss (2007), who implemented change using the collaborative method. The authors noted that strong clinical leadership, adequate resources and ensuring all voices are heard were factors that contributed to the successful implementation of change. This was particularly the case where change was implemented at a number of sites; the sharing of experiences between teams facilitated change as other sites were made aware of what was possible. Our study had many similarities to Newton et al.'s (2007) findings, particularly since members of the site working groups also were members of the research team. Experiences and initiatives developed at each site were shared with the research team as a whole and then disseminated among other working groups. This facilitated a sense of shared journey as working group members worked towards site specific variations of the common goal

of enhancing IP practice. Griffiths, Anderson, Coyne, Beastall and Hill (2010) also reported success in the implementation of an IP patient record; key facilitators in this project included a dedicated project implementation team, support from clinical and administrative leadership, and engagement with all stakeholders.

To create an environment of shared decision making, at each site, working groups were established to identify site-specific barriers and challenges to working collaboratively. A key realisation was that although the units were very much multi-disciplinary, where members of different disciplines worked side by side, they were not IP and collaborative. Participation of educators and academics on the working groups facilitated a shared learning of IPE and practice and provided the necessary resources for this to occur.

Building on the theme of team dynamics and engagement, there was a constant connection between all levels of project participants with representatives of the research team and steering committee during working group meetings. This facilitated sharing knowledge between groups and ensured all participants were "on the same page". Constant engagement and connection between all levels and members of the project is attributed to effective project management and consistent effort to include all members of the team. As the popularity of clinical learning units continues to grow as one mechanism to facilitate collaborative practice, our study adds to the body of evidence that supports their development and provides evidence of the need to engage administrators and managers in the process.

A main purpose of the IPCLU was to enhance IPE for students completing clinical placements on the units. Feedback from students on the units during IPCLU implementation is positive; however, the sample size is small. The IPCLU itself will take time to become a part of the unit culture, and thus, the impact on the student experience may be incremental. Moreover, the impact on staff recruitment and retention will not be immediate, and the effects, if any, may take months to materialise. However, we anticipate that engaged staff who are valued by their co-workers for their contributions to healthcare delivery will be happier and likely remain on the unit.

Limitations

As the project was conducted on one unit at each of the three sites, the number of clinicians on the working groups, while representative of each of the units, was relatively small, and similarly the research team and steering committee were also relatively small. The focus groups comprised members of each of these groups, and therefore the small number of participants resulted in only one focus group for working group members and one focus group for research team and steering committee members. While we believe our findings are representative of each group, they may be limited by the small number of participants in the focus group sessions.

Conclusion

Interprofessional and collaborative practice is essential for successful healthcare delivery. Health professional education must include theoretical and practical elements to prepare graduates to work effectively in team-based healthcare delivery, and IPCLUs

appear to be one mechanism that may facilitate learning of collaborative practice competencies. Successful implementation of IPCLUs can be achieved with participation and leadership from clinicians and educators as well as support from administration at both the academic institution and the healthcare agency.

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References

- Begun, J. W., White, K. R., & Mosser, G. (2011). Interprofessional care teams: The role of the healthcare administrator. *Journal of Interprofessional Care*, 25, 119–123. doi:10.3109/13561820.2010.504135
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. Retrieved from http://dx.doi. org/10.1191/1478088706qp0630a
- Budgen, C., & Gamroth, L. (2008). An overview of practice education models. *Nurse Education Today*, 28, 273–283. Retrieved from http://dx.doi.org/10.1016/j. nedt.2007.05.005
- Curran, V. R., Deacon, D. R., & Fleet, L. (2005). Academic administrators' attitudes towards interprofessional education in Canadian schools of health professional education. *Journal of Interprofessional Care*, *19*(Suppl. 1), 76–86. doi:10.1080/13561820500081802
- Davidson, R. A., & Waddell, R. (2005). A historical overview of interdisciplinary family health: A community-based interprofessional health professions course. *Academic Medicine*, *80*(4), 334–338.
- Dopson, S., & Fitzgerald, L. (2006). The role of the middle manager in the implementation of evidence-based health care. *Journal of Nursing Management*, 14, 43–51. doi:10.1111/j.1365-2934.2005.00612.x
- Ericson, A., Masiello, I., & Bolinder, G. (2012). Interprofessional clinical training for undergraduate students in an emergency department setting. *Journal of Interprofessional Care*, 26(4), 319–325. doi:10.3109/13561820.2012.676109
- Ferlie, E., Fitzgerald, L., Wood, M., & Hawkins, C. (2006). The nonspread of innovations: The mediating role of professionals. *Academy of Management Journal*, 48, 117–134.

- 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:10.1016/S0140-6736(10)61854-5
- Gilbert, J. H. V. (2005). Interprofessional learning and higher education structural barriers. *Journal of Interprofessional Care*, *19*(Suppl. 1), 87–106. doi:10.1080/13561820500067132
- Griffiths, P., Anderson, A., Coyne, C., Beastall, H., & Hill, J. (2011). Implementing an interprofessional patient record. *Clinical Medicine*, *11*(2), 128–131. doi:10.7861/clinmedicine.11-2-128
- Jacobsen, F., Fink, A. M., Marcussen, V., Larsen, K., & Hansen, T. B. (2009). Interprofessional undergraduate clinical learning: Results from a three year project in a Danish interprofessional training unit. *Journal of Interprofessional Care*, 23(1), 30–40. doi:10.1080/13561820802490909
- Morphet, J., Hood, K., Cant, R., Baulch, J., Gilbee, A., & Sandry, K. (2014). Teaching teamwork: An evaluation of an interprofessional training ward placement for health care students. *Advances in Medical Education and Practice*, 5, 197–204. doi:10.2147/AMEP.S61189
- Newton, P. J., Davidson, P. M., Halcomb, E. J., & Denniss, A. R. (2007). Barriers and facilitators to the implementation of the collaborative method: Reflections from a single site. *Quality and Safety in Health Care*, 16, 409–414. doi:10.1136/ qshc.2006.019125
- Sommerfeldt, S. C., Barton, S. S., Stayko, P., Patterson, S. K., & Pimlott, J. (2011). Creating interprofessional learning units: Developing an acute-care model. *Nurse Education in Practice*, 11, 273–277. doi:10.1016/j.nepr.2010.12.003
- University of Alberta. (n.d.). *Interprofessional learning pathway competency framework*. Retrieved from http://www.hserc.ualberta.ca/en/Resources/CurricularResources/ InterprofessionalLearningPathw.aspx
- Vanderzalm, J., Hall, M., 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, 178–185. doi:10.1002/rnj.78
- World Health Organization (WHO). (2010). *Framework for action of interprofessional education and collaborative practice*. Geneva, Switzerland: Author.