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# Nursing Faculty Considerations in Closing the Gaps of Interprofessional Education

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## Abstract

Interprofessional education (IPE) and healthcare collaboration expectations have been established in both educational and clinical settings nationally and internationally. While multiple models for implementation have been developed, identifying the best model can be challenging. Through presenting a review of considerations pertinent to structuring nursing education in the context of IPE, as well as to provide a brief overview of IPE models and exemplars of programs using IPE, this article identifies gaps in, and the lack of, analysis and evaluation of IPE and its effectiveness on quality outcomes. In addition, benefits and barriers to IPE and IPCP will be discussed. Recommendations to nursing programs for IPE inclusion in curricula will be addressed.

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## Introduction

Initiatives for the development of interprofessional education (IPE) and healthcare collaboration have been clearly established in both educational and clinical settings nationally and internationally (Institute of Medicine [IOM], 2001, 2003; World Health Organization [WHO], 2010). In the United States, the IOM (2001) provided evidence for the significance and importance of interdisciplinary teamwork in cultivating quality care. Interdisciplinary partnerships have been emphasized in healthcare practice and are now generally considered a core competency for all health care professionals (IOM, 2003). Global perspectives similarly emphasize an increased desire and emphasis on IPE and collaborative practice (WHO, 2010; Reeves, Perrier, Glodman, Freeth, & Zwarenstein, 2013).

In a changing healthcare arena, nursing has the opportunity to strengthen and define nursing roles and knowledge and to create an enduring presence in interprofessional collaborative practice (IPCP) (Clarke & Hassmiller, 2013). Pfaff, Baxter, Jack, and Ploeg (2014) proposed facilitators that may help new graduate nurses become engaged in IPCP: self-confidence, knowledge and experience, communication skills, critical thinking, valuing, informal support, respect, trust, prescribed orientations, nurse residency programs and externships, stable nurse preceptors, and mentors who model IPCP (p. 13). Not surprisingly the authors highlighted gaps in education including communication, conflict resolution, delegation, and sufficient knowledge and understanding of the roles of the registered nurse (RN) and other healthcare professionals.

The purpose of this article is to present a review of considerations pertinent to structuring nursing education in the context of IPE, as well as to provide a brief overview of IPE models and exemplars of programs using IPE. In addition, benefits and barriers to IPE and IPCP will be discussed. Bachelor of Science in Nursing (BSN) programs will be emphasized, and the lack of analysis and evaluation of IPE and evidence of effectiveness on quality outcomes will be addressed.

## Background

Definitions of IPE and collaborative practice vary across organizations and settings. The World Health Organization (WHO) identifies collaborative IPE practice as occurring when professional health care team members work together to deliver optimal quality and comprehensive health care in diverse health care settings (WHO, 2010). Interprofessional collaborative practice (IPCP) develops as professional disciplines work together to learn interactively in order to improve IPE and patient care (Pfaff et al., 2014). Interprofessional collaborative practice revolves around healthcare professionals who integrate services to provide continuous, reliable care (Milton, 2013).

The Interprofessional Education Collaborative (IPEC) identified four Interprofessional Collaborative Practice Competency Domains: values and ethics for interprofessional practice, roles/responsibilities, interprofessional communication, and teams and teamwork. IPEC further notes that these competencies are an important part of forming a professional identity; however, overlapping interprofessional competencies can be a source of tension between professions (IPEC, 2011). Implementation of IPE has been supported by current and emerging research studies in chiropractic services, speech pathology, education, nursing, and medicine (Bajnok, Puddester, MacDonald, Archibald, & Kuhl, 2012; Bednarz & Lisi, 2014; Gough, Jones, & Hellaby, 2013; Morris & Matthews, 2014; Priest, Roberts, Dent, Blincoe, & Lawton, 2008; Suleman et al., 2014; Ying, Chiang, Chua, & Klainin-Yobas, 2012) as well as governmental and professional organizations (American Association of Colleges of Nursing [AACN], 2006, 2008, 2011; Clarke & Hassmiller, 2013; Lutfiyya, Brandt, Delaney, Pechacek, & Cerra, 2016). Improving patient outcomes may be seen to be reliant on interdisciplinary cooperation and collaboration (Keene, Byington, & Samples, 2009; Nelson, King, & Brodine, 2008; Sterchi, 2007). As described in the literature, skills and knowledge needed for successful IPCP may include communication, understanding of one's own professional role and others' roles, conflict resolution and negotiation, and collaboration (Apker, Propp, Ford, & Hofmeister, 2006; Bainbridge, Nasmith, Orchard, & Wood, 2010; MacDonald et al.,

2010; Pare, Maziade, Pelletier, Houle, & Maximilien, 2012).

The American Association of Colleges of Nursing (AACN) addresses IPE and IPCP in all three essentials documents for BSN, Master of Science in Nursing (MSN), and Doctor of Nursing Practice (DNP) programs (AACN, 2006, 2008, 2011). In the *Essentials of Baccalaureate Education for Professional Nursing Practice* (AACN, 2008), “Essential VI: Interprofessional Communication and Collaboration for Improving Patient Health Outcomes,” clearly addresses that the BSN-prepared RN is to contribute nursing’s unique perspective to IPCP teams to optimize patient outcomes (p. 22-23). “Interprofessional education enables the baccalaureate graduate to enter the workplace with baseline competencies and confidence for interactions and with communication skills that will improve practice, thus yielding better patient outcomes” (AACN, 2008, p. 22). Within this essential, AACN identifies six outcomes expected of BSN students upon graduation which align with the IPEC domains identified above. The outcomes for Essential VI concern the engagement of BSN prepared nurses in IPCP and how they provide nursing’s unique perspective to the IPCP team to design and optimize quality patient outcomes. While the imperative to accomplish the quality patient care outcomes is clear, whether or not nursing and other health care disciplines are achieving this goal is not. Collaboration with interdisciplinary teams is also clearly delineated within the Tri-Regulator Collaborative Position Statement on Interprofessional, Team-based Patient Care (National Council of State Boards of Nursing [NCSBN], 2014).

### **Considerations for Emergence of Interprofessional Education and Practice**

The body of literature surrounding IPE and IPCP models is growing rapidly. National and international agencies and groups such as the IOM (2001, 2003), the Tri-Regulator Collaborative (NCSBN, 2014), AACN (2006, 2008, 2011), the Cochrane Collaboration (Pfaff et al., 2014), and the World Health Organization (2010) are pushing for IPE and IPCP for the best interest of the patient and quality outcomes. Although there are increasing reports of IPE and IPCP being integrated in curricula and practice settings, and gaps,

including outcomes are not measured are emerging causing barriers to the full implementation of IPCP. Lennox and Anderson (2012) note that IPCP is often an added educational experience in which faculty have simply added IPE to existing curricula. While “add ons” may not be as well structured as independent designs from IPE teams, professional curricula must be responsive to their discipline-specific standards and expectations. Therefore, adding more content results in a significant challenge for the addition of IPCP didactic content and/or clinical expectations.

A significant paucity of literature surrounds development and measurement of IPE/IPCP outcomes. Although AACN (2006, 2008, 2011) and IPEC (2011) clearly identify competencies and outcomes, Stevenson, Seenan, Morlan, and Smith (2012) state that a lack of agreement and understanding remains regarding outcomes and competencies for IPE/IPCP. Without clear agreement on competencies, outcomes for both education and practice may be difficult to identify. Lennox and Anderson (2012) argue that there is skepticism regarding the potential ability of IPCP to actually improve patient outcomes. However, a study in a simulated IPE learning environment by Shrader, Kern, Zoller, and Blue (2013) identified positive clinical education outcomes.

### *IPE Models*

Many different models of IPE for educational programs are described in the literature, including the extra-curricular, crossbar, or IPE enhancement models (Brewer & Jones, 2013; Lennox & Anderson, 2012; Bridges, Davidson, Odegard, Maki, & Tomkowiak, 2011; Corbridge, Tiffen, Carlucci, & Zar, 2013; Deutschlander, Suter, & Lait, 2012). The most commonly used models are the extra-curricular and crossbar models, which focus on pre-established student teams in the clinical setting, and the IPE enhancement model, which focuses on concurrent student placement in the same setting (Deutschlander et al., 2012). Of the programs reviewed in the literature, only two programs utilized the acute care setting; one focused on educating current staff while the other focused on pre-licensure students in the community setting.

The Leicester Model of Interprofessional Education (IPE) emerged as an early entrepreneurial development within the National Health Service (NHS) evidenced-based care pathways (Lennox & Anderson, 2012). This model is adopted from the Kolb learning cycle consisting of four steps and is implemented in clinical practice. The authors point out that this model “has been hard to mainstream” but is “relevant for any integrated IPE curriculum whether for undergraduate studies or professional practice” (p. 220). The model combines patient and professional perspectives in which “the learning takes place in a dynamic clinical environment in which the student team and the patient’s current professional team work and learn alongside one another” (p. 221). Although the model originated in primary care, it is one of the few that has been successfully applied to acute care, community rehabilitation hospitals and within mental health teams (Deutschlander et al., 2012).

Deutschlander et al. (2012) compared and contrasted the extra-curricular model (Cook, 2005), crossbar model (Barr, Koppel, Reeves, Hammick, & Freeth, 2005), and the interprofessional enhancement approach. The extra-curricular model has been labeled as an ‘elective program’ where courses with IPE content are developed as “add-ons to existing courses” (Deutschlander et al., 2012, p. 254). The crossbar model (Deutschlander et al., 2012), also referred to as the centralized curricular model, converts clinical and non-clinical, discipline-specific courses into joint IPE courses across various programs and curricula. While implemented at many academic institutions, both the extra-curricular and crossbar models involve extensive curriculum development, faculty/organizational and financial commitment, culture change, and logistical problems in placing students in teams. The IPE enhancement approach differs from these two models by enhancing IPE content and activities into existing core curriculum courses of various disciplines, integrating IP mentoring, and utilizing the current clinical placements of students. This approach thus avoids the logistical problems of development and placing student teams in a clinical setting.

### *Exemplars of Programs using IPE*

Bridges et al. (2011) present three exemplars of IPE initiatives in academic institutions. The Rosalind

Franklin University of Medicine and Science and University of Florida follow the crossbar model utilizing teams and the community setting. The University of Washington appears to use the extra-curricular model with teams working together in simulation and community settings. Florida Atlantic University (FAU) has a well-developed IPE program following the extra-curricular model and teams in the community setting as well (Jacomino et al., 2015). Using the crossbar model, Wright State University partnered with Kettering Medical Center to design a new interprofessional dedicated education unit in the hospital’s trauma unit (Olsen, 2015).

Whereas the Leicester Model focused on both the current and future workforce, the extra-curricular and crossbar models and the IPE enhancement approach focus on student education and development. Although FAU’s IPE program has well-developed sessions on roles and responsibilities, communication and teamwork, and health care policy, the FAU team identifies as one of its major learned lessons the importance of leveling of students based upon education and experiences (Jacomino et al., 2015). Additionally, the Rosalind Franklin University of Medicine and Science, University of Florida, University of Washington, and FAU IPE programs are implemented for pre-licensure students at various stages of their educational programs with the practice component in the community setting. Wright State University’s IPE program requires nursing students to have senior status but do not specify if these students are pre-licensure and/or RN-BSN students (Olsen, 2015).

### *Possible Benefits of IPE and IPCP*

The literature clearly states potential benefits that may be associated with IPCP. Wright and Brajtman (2011) note that IPCP teams are increasingly recognized as being able to deliver high quality patient care. However, this is not supported by evidence. Purtilo (2012) states that the more the team works together in complex patient care situations, the more the individual members can develop a sense of camaraderie and deep interdependence which can foster greater understanding and recognition of the role contributions to the full scope of patient care. Clark, Cott, and Drinka (2007) likewise point out that



disagreements will emerge between providers and disciplines due to not fully understanding each other's role. The IPCP team can work together to "capture the strength of these disagreements, and to use this strength to increase the effectiveness of care" (Clark, Cott, & Drinka, 2007, p. 592).

There are potential benefits of IPCP that can be measured as outcomes. These benefits and measurable outcomes, however, will be manifested from the quality of how IPE is designed and structured for all students in both didactic and clinical settings. Additionally, IPE must include the commitment and participation of clinical partners.

### *Barriers to Nursing Student and New Graduate Engagement in IPCP*

Barriers to engagement in IPCP may begin during IPE in the nursing program even with the best intentions. Barriers identified and discussed in the following paragraphs include: IPE model chosen, faculty commitment to IPE, transitioning the new graduate nurse to IPCP with or without IPE in the curriculum, clinical partners' commitment to IPCP, and professional role and turf issues. There are primary challenges that emerge which have not yet been thoroughly addressed. These challenges impact the effectiveness of IPE through the student journey to become a graduated professional. In addition to implementing an IPE model, significant areas that must be considered and integrated include concerns that students not only understand their discipline's role in the healthcare system but the roles of the other disciplines, interpersonal and interprofessional communication skills, and the student's exposure to and amount of experience in the healthcare setting, specifically the acute care setting. Regardless of the IPE model/approach, these areas will impact the effectiveness of IPE and future IPCP.

Barriers of new graduate nurse engagement in IPCP emerged in three factors: individual, team and organizational. Individual factors included lack of self-confidence, lack of knowledge and experience in practice in general as well as interacting with other healthcare professionals; lack of knowledge about the roles of other healthcare professionals paired with the lack of practical knowledge that resulted in the

inability to discern what information needed to be offered and with which healthcare professional to consult regarding the information (Reeves et al., 2013, p. 12). Team factors included a "perceived lack of informal support from healthcare team members ... and disrespect in the work environment" (Reeves et al., 2013, p. 12). The major organizational barrier was insufficient formal support from institutional leaders (Reeves et al., 2013).

IPE/IPCP as an added experience of the curriculum may not be mandated for every student. This can create a significant barrier, with multiple layers of complexity. IPE experiences designed and reserved for students who meet established academic criteria can be disruptive of the overall clinical experience. Rich educational experiences must be designed for both pre-licensure and post-licensure baccalaureate nursing students, rather than only for those who have higher grades or stronger clinical skills. As an example, although a dedicated education unit would provide a very rich and intense IPE experience, such an experience could not accommodate all students because of space and time issues. Further, not all students are ready for this type of clinical setting.

There is little information regarding new graduate nurses and IPCP. Interprofessional collaborative practice (IPCP) is complex, "a dynamic process that evolves over time, ... hindered by stress that continues throughout the first year of practice, and [its] mastery with diverse clinical situations requires two to three years of practice" (Reeves et al., 2013, p. 6). Benner (2001) reminds us that the new graduate nurse is an advanced beginner and, depending upon the educational preparation and experience, may not have been sufficiently exposed to IPCP. Healthcare professionals must be able to discuss their own discipline-specific knowledge base in order to engage in interprofessional care (WHO, 2010), which may be difficult for new graduate nurses.

Pfaff et al. (2014) conducted an integrative review of factors that may influence new graduate nurse engagement in interprofessional education (p. 4). As the new graduate nurse is an advanced beginner, Pfaff et al. reported empirical evidence supporting that the new graduate nurse experiences pressures that may interfere with his/her IPCP development. Pressures

include lack of confidence, knowledge and experience, and fear of rejection by the healthcare team.

Because each profession examines care for patients and families through unique disciplinary and ethics lens, collaboration may be hindered (Ewashen, McInnis-Perry, & Murphy, 2013). Along with differing perspectives of patient care, other obstacles may interfere with IPCP including values, communication, professional roles, and turf issues, as well as a hierarchical subjugation by some professionals (Gilbert, 2005). Healthcare professionals need to understand each other's role from which emerges professional viewpoints, responsibilities, and competencies in order to accomplish effective collaboration and communication to provide the best quality of care for the patient. Planning by educators must be coordinated with clear awareness of strategic design in health systems, and health systems must be aware of educational requirements and boundaries (IOM, 2015). Effective collaborative interprofessional partnerships require that professional team members understand that "professional autonomy becomes autonomy-in-relation to communities of others" (Ewashen et al., 2013, p. 334). However, keep in mind that the healthcare institution with its organizational hierarchy, policies, and procedures may actually impede IPCP. Ewashen et al. (2013) point out how within the institution as a whole there may need to be some changes to help gain full participation in IPCP.

## Recommendations

Several recommendations can be gleaned from the IPE literature and the experiences of early IPE programs which are pertinent for consideration by faculty who are planning to establish an interprofessional component to the educational or clinical experiences of baccalaureate nursing students (See Table 1). These recommendations include careful selection of a specific approach, commitment of faculty, as well as processing the curricular addition; increasing nursing confidence and competence with an IPE approach, and beginning identification of IPE program and learning outcomes.

Faculty and administrators should choose a specific IPE/IPCP model, based on identified strengths and challenges present in the programs. Allowing adequate time for selection and preparation will

ultimately reduce time and complications which could occur during the implementation phases. IPE models previously described (Lennox & Anderson, 2012; Brewer & Jones, 2013; Bridges et al., 2011; Corbridge et al., 2013) present many implications for consideration by faculty when considering the most appropriate model.

Incorporating IPE within a curriculum requires commitment and flexibility from the faculty (Pare et al, 2012; Schoening et al., 2015). Bleich (2016a) addresses the selection of faculty as one of the most significant predictors of IPE program success. The faculty must consider the multiple mechanisms by which IPE experiences can be added to the curriculum. As discussed in the previous sections of models and exemplars, specific courses may be added across disciplines, or IPE content can be integrated within and across multiple courses designed to build competencies and confidence. Interprofessional collaborative practice (IPCP) can be incorporated in clinical rotations with supportive clinical partners. The essential nature of IPE supports the importance for BSN students to receive this education and develop competencies.

Programs should identify clinical partners which will embrace IPE/IPCP for student rotations and interprofessional communication and development. Bridging the gap between the academic and practice settings enables clinical partners and nurse faculty to work closely together to design IPE/IPCP experiences. The academic partner, willing to help design and offer professional development on IPE/IPCP, will result in a stronger partnership and experience for students and practitioners.

Many RN-BSN students, in particular, would greatly benefit from IPE and may even provide learning opportunities within their own clinical settings; however, many RN-BSN programs are on-line, and these students have full-time employment commitments. The RN-BSN students may be novices to BSN education and practice, but they are not novices to the healthcare setting. Faculty may wish to consider partnering pre-licensure students with RN-BSN students to enrich the teaching/learning environment and foster camaraderie between these groups. Additionally, working with health care organizations to implement IPCP workshops

which focus on the dynamics and complexity of communication and a mutual respect for the role of each health care discipline in the institution will serve to expand and connect IPCP.

Curricular decisions should help the new graduate nurses to feel confident as they integrate IPE education and skill into practice. IPE content should not only increase the discipline's role, but should also create links and bridges across disciplines (Bleich, 2016a). Apker et al. (2006) address understanding of nursing communication using collaboration, credibility, compassion, and coordination. Clinical facilities may need to augment and strengthen the education and experience of new graduates, paying close attention to where new nurses are educated and the amount of IPE and IPCP included in their curricula.

The literature has only begun to identify measurable and specific patient care outcomes impacted by IPCP. While discipline-specific programs struggle to meet IPE mandates, there is a paucity of data regarding the impact and outcomes for education and patient care. Shrader et al. (2013) report effective interprofessional skills to be predictive of positive clinical outcomes in a simulated learning environment. Bleich (2016b) stresses the importance of balancing outcomes across disciplines to preserve and balance contributions.

## Conclusion

There are many proposed and possible benefits from IPE and IPCP described in the literature. However, there is little evidence to describe and support the impact of IPE/IPCP on patient care outcomes and professional practice. Interprofessional collaborative practice (IPCP) is complex, "a dynamic process that evolves over time, ... hindered by stress that continues throughout the first year of practice, and [its] mastery with diverse clinical situations requires two to three years of practice" (Reeves et al., 2013, p. 6). Pfaff et al. (2014) also remind us that, depending upon educational preparation and experience, the new graduate nurse may not have been sufficiently exposed to IPCP. Nursing faculty are pivotal in designing solid IPE/IPCP experiences in the curriculum, working closely with clinical partners to help ensure a smoother transition to practice. Because of the stress experienced throughout the first year of practice, and during the graduate nurse's IPE preparation, the new

graduate nurse must be mentored in assimilating the role of RN and in IPCP. This will help IPCP to be successful and yield positive, measurable outcomes.

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