Negotiating challenges in community-based interprofessional education programs

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Abstract
Several expert panels have recommended interprofessional collaborative practice (IPCP) as an integral part of improving the quality and safety of care delivery to meet the complex health needs of patients. IPCP is attained by collaborative communications between two or more health professionals from various disciplines who share in clinical decision-making. IPCP increases patient satisfaction and improves health outcomes, yet few health professional students learn how to work within collaborative interprofessional teams. The health professional programs at one Midwestern University implemented Interprofessional Education (IPE) programs with the goal of facilitating IPCP team work and to foster effective communications among the health professional students. The successes that resulted were positive comments from students, faculty, and clinical staff and increased student confidence in interactions with other disciplines. The challenges that were encountered include scheduling difficulties, apathy of faculty and students, and incompatible clinical practice experiences. Understanding challenges and negotiating ambiguity of implementing IPE/IPCP community-based programs is important in developing a well-trained interprofessional workforce and closing the gap between health professionals’ education and clinical practice experiences.
Introduction

Over the past two decades, numerous reports have recommended the inclusion of interprofessional practice as an integral part of improving the nation’s health care system and for meeting the increasingly complex health needs of patients (World Health Organization [WHO], 2010; Lancet Commission, 2010; Interprofessional Education Collaborative [IPEC], 2011; Institute of Medicine [IOM], 2000, 2003, 2013). The Institute of Medicine in their report, *To Err is Human*, (IOM 2000) focused on quality and safety in healthcare, recommending improved interprofessional communication to reduce morbidity and mortality rates. *Crossing the Quality Chasm: A New Health System for the 21st Century* suggested interprofessional collaborative practice as a strategy for health professionals to effectively work together in care teams (IOM, 2001). In a more recent report, the World Health Organization (2010) analyzed the global workforce shortage, identifying increased IPE as one solution for improving the delivery of safe, competent care, and for addressing health professional workforce needs.

Interprofessional education (IPE) and interprofessional collaborative practice (IPCP) first emerged in the United Kingdom in the mid 1960’s with early initiatives focusing on primary care and community-based care (Barr & Waterton, 1996). Interprofessional education is an approach to better prepare healthcare students for future careers as members of interprofessional care teams (Bridges, Davidson, Odegard, Maki, & Tomkowiak, 2011). The Center for the Advancement of Interprofessional Education (CAIPE) (Finch, 2000) defined IPE as an educational opportunity when two or more health professions learn with and from one another. CAIPE also viewed IPE as a way to improve collaboration, improving both quality and delivery of health care services.

As a standard for healthcare delivery, interprofessional teams are becoming more common. Yet, there remain gaps between the demand for interprofessional health providers and the incorporation of interprofessional learning into core curricula (Gilbert, 2005). Students in healthcare professions, including advanced practice students in nursing, pharmacy, social work, dentistry, and clinical psychology, are entering the workforce without the necessary skills to function effectively as members of interprofessional clinical teams (McNair, Stone, Sims, & Curtis, 2005). Efforts to improve this inadequacy are ongoing through the implementation of evidence-based practice and incorporating interprofessional skills training into the classroom and clinical education of health professional students.

IPE and IPCP have been identified as strategies to improve quality and safety in healthcare by providing students opportunities to work as collaborative teams (IOM, 2003). According to Barnsteiner, Disch, Hall, Mayer, and Moore (2007), teamwork among health professionals is seldom intuitive, but a skill that must be acquired through education and clinical training. The vast majority of health professional students continue to receive their training within the confines of their own discipline. Teamwork with other disciplines has frequently been omitted from curricula with the assumption that health professionals will learn interprofessional collaboration in the workplace following graduation (Newhouse & Spring, 2010).

IPE and IPCP, as part of the core curricula of health professional education, help to facilitate interpersonal communication (Brock et al., 2013), foster flexibility among the health professions (Koppel, Barr, Reeves, Freeth, & Hammick, 2001), and promote adaptability within ever-changing healthcare delivery systems (Freeth, Meyer, Reeves, & Spilsbury, 1998); all important attributes for improving health outcomes. IPCP has also been credited for helping to reduce hospital stays, admissions, and readmissions (Dietrich et al., 2004; Tieman et al., 2006), as well as a way for improving the management of complex health issues such as multiple chronic conditions (WHO, 2002). Additionally, IPE and IPCP can lead to greater confidence and job satisfaction among the health professions (Keller, Eggenberger, Belkowitz, Sarsekeyeva, & Zito, 2013). As the U.S. population increasingly grows older and more culturally diverse, an integrative approach to care will require increased numbers of health professionals trained in IPE and IPCP.

IPE may be implemented in freestanding programs or through integration of two or more established professional programs (Barr & Waterton, 2000). Casto (1987) advocated the development of IPE curricula early in students’ professional clinical education and clinical practice in order to encourage the benefits of working...
collaboratively as members of interprofessional care teams. According to Clark (2006), IPE is conceptually derived from social learning theory and includes components of leadership, communication, and conflict management among interprofessional team members. Closely aligned with experiential learning, a process-based method (Kolb, 1984), IPE draws on an individual's reactions and actions informed by group experiences, such as flexibility and cooperation as a member of a team. Similar to the experiential processes, IPE often includes conflict resolution, helping students learn to negotiate differing opinions and values while gaining insight, understanding, and trust among team members (Orchard, Curran, & Kabene, 2005).

Although IPE and IPCP have numerous benefits in the delivery of care and for improving quality and safety, implementation of these programs is not a seamless, natural process for most health professional programs. Integrating interprofessional teamwork and learning into pre-existing health education frameworks comes with its own set of barriers and challenges. Lash, Barnett, Parekh, Shieh, Louie, and Tang (2014) described potential barriers to IPE as a lack of institutional support for cross-discipline curriculum, shared learning spaces, and incongruity of perceived benefits of IPE programs among health professionals. Other major challenges for implementing IPE programs identified in the 2013 report, Learning to Improve Health from Interprofessional Models Across the Continuum of Education to Practice: Workshop Summary, are the lack of preparation of health professional faculty to deliver IPE training and classroom and clinical scheduling conflicts among the various professional programs (IOM, 2013).

A significant challenge facing implementation of IPE and IPCP programs is that the provision of these concepts is relatively new in many U.S. institutions, coupled with a lack of familiarity of IPE and IPCP by practicing health professionals. This lack of awareness may interfere with the didactic and clinical integration of IPE/IPCP into the educational experiences of health professional students. The purpose of this paper is to discuss one Midwestern university’s strategies for implementing IPE and IPCP programs for health professional students and to discuss the challenges associated with implementing these initiatives within various health professions schools and community-based healthcare facilities.

In response to the growing need to educate and develop a collaborative and interprofessionally-oriented healthcare workforce, the Health Resources and Services Administration’s (HRSA) Advanced Nursing Education Program (ANEP) awarded funds to assist in the development of IPE curricula that included several community-based IPCP experiences. These projects required creating an interprofessional practice framework that was flexible enough to negotiate unforeseen challenges as well as adaptable for working with multiple health professions schools and community partners.

Project Models

One practice model utilized in IPE programs is the Community of Practice (CAP), a model of situational learning based on collaborative teams that is guided by knowledge rather than task, and functions as an informal self-organized network of individuals with diverse skills and experiences who share information (Wenger, 1998). This model provides a foundation where participants are empowered to become change agents based on their designated profession and it incorporates three core elements: a domain (an identity defined by shared interests); a community (shared learning through relationship building); and a practice (shared resources, experiences, and problem-solving) (Wenger, 2007). The CAP model was adopted for these ANEP projects and created the framework for developing the IPE curricula and the clinical practicum experiences to promote open professional communication.

Another model employed in IPE programming is Plan-Do-Study-Act (PDSA), a four-step rapid-cycle quality improvement strategy used in both governmental agencies and healthcare organizations (Langley, Moen, Nolan, Nolan, & Provost, 2009). This model allows for flexibility to identify and adjust programming implementation strategies as challenges arise, rather than waiting for summative evaluation. PDSA also helps to ensure that evaluation and modification of implementation strategies are appropriate and occur in a timely manner. For the purposes of these ANEP IPE initiatives, PDSA was used to establish Executive Committees with representation from the health professional teaching faculty and clinical practice partners to oversee all aspects of the project and for changing the process or teaching strategies based on
evaluation and feedback. PDSA has been instrumental for addressing unforeseen challenges that have occurred at the clinical practicum sites and in adapting to changes in project personnel or faculty.

Project Procedures

Health professions students’ educational experiences primarily focus on developing competency in clinical proficiency and safety and discipline-specific healthcare strategies, ethics, and health policy. Typically, this rigorous schedule allows for little time to guide students on resolution of interpersonal challenges with patients and/or colleagues. Few, if any, classroom hours relate to interprofessional or interpersonal relationships or the integration of a team-approach to managing the challenges and vulnerabilities of diverse patient populations. To foster interprofessional team work, the two ANEP IPE projects at this university created patient-centered IPE courses with didactic and clinical components with student teams providing healthcare to medically underserved patients with complex health conditions.

The first ANEP IPE project involved graduate students from nursing, pharmacy, dentistry, and social work and was designed to enhance provider-patient relationship building by improving communications among members of the IPCP team while providing primary care to a racially diverse urban patient population. The second ANEP IPE project focused on care for veterans and their family members with graduate students in nursing, pharmacy, clinical psychology and social work. This project focuses on helping students to gain knowledge of military culture and the unique behavioral health issues of veterans. The project goal was to improve interprofessional communication skills while delivering primary care to veterans and their families, including veterans with persistent physical and behavioral disorders such as post-traumatic stress disorder (PTSD), substance abuse disorder, anxiety, depression, and physiological disorders associated with cardiovascular disease. The clinical practicum for this project is at a Veterans Administration primary care clinic in a large Midwestern city. Opportunities to infuse the interprofessional core competencies into the student’s clinical educational experiences is elemental to these IPE projects.

IPEC Core Competencies

The Interprofessional Education Collaborative Expert Panel (2011) developed four core competencies for interprofessional education: Values/Ethics, Roles/Responsibilities, Interprofessional Communication, Teams/Teamwork that were designed to create a framework from which healthcare facilities and institutions of higher learning could both educate practicing clinicians and students in health professions programs. These competencies were designed to strengthen health professions cooperation, transform healthcare delivery, and form the basis for all IPE programs developed by the university. The IPE core competencies addressed in the two ANEP projects are: interprofessional communication, values/ethics, and teams/teamwork, with the remaining competency roles/responsibility infused throughout the other three competency areas.

Communication has been cited as a leading cause for failure in healthcare (IOM, 2000). For these projects, communication focused on improving provider presence and thoughtful response in working with patients with multiple chronic conditions. Specific focus was placed on exhibiting respectful and empathetic listening which are necessary skills for creating person-to-person partnerships with patients and for exploring ways to resolve issues of the patient's ambivalence in managing their own health. Values and behaviors are inextricably linked as individuals express their values through their behaviors and actions. Helping students to become more aware of their own values can serve in developing respect for others’ values and for making patient-centered care decisions. In IPCP, recognition of the commonalities that team members share can enhance trust and improve team communication. Teamwork is the foundation of an effective and efficient interprofessional practice. Because teamwork is an acquired skill, the importance of working cooperatively across disciplines was reinforced throughout the two projects in the classroom setting through small group work and open communication channels during the clinical practicum.

Student Participants

Cohorts of between 10-15 students in advanced nursing, pharmacy, dentistry, social work, and clinical
psychology participated in each IPE project each semester. Students are selected based on the specific clinical course and their desire to participate in these projects. Evaluation of student participation is measured quantitatively each semester through pre-post survey instruments including the Revised Readiness for Interprofessional Learning Scale, Community-Oriented Healthcare Competency Scale, Attitudes Toward Healthcare Teams Scale, Interprofessional Collaboration Scale, and qualitatively through focus groups and reflective journals.

Curricular Content

These ANEP IPE projects were grounded in the humanities and the behavioral sciences to increase students’ capacity to be more self-reflective and to improve critical thinking skills that are necessary for making informed decisions. Narrative discourse (Charon, 2001; Clark, 2013) was used to assist students’ understanding of a patient’s story during the behavioral and physical health assessment. The narrative method engages students in ethical reasoning by focusing on the patient’s perspective in healthcare decision-making. A student’s ability to become engaged and present with the patient facilitates communication. This humanistic communication is learned by studying art and art critical theory and requires critical self-reflection by drawing on higher order thinking, which is necessary when making an informed judgement (Nkanginieme, 1997; Naghshineh et al., 2008; Schaff, Isken, & Tager, 2011). Incorporating the study of art images into these IPE projects provided an alternative method for teaching interpersonal communication skills and for enhancing student engagement with their patients.

From the behavioral sciences, students learned techniques used in Motivational Interviewing (MI), an effective strategy to facilitate patients’ health behavior changes for better managing their health conditions (Lundahl & Burke, 2009). Coupled with the MI training were specific techniques for enhancing interpersonal communication, including voice level/tone and non-verbal cues for building patient trust. Specific to the project focusing on veterans, students were introduced to military culture and the unique attributes related to military life and the healthcare needs of this vulnerable patient population. Content related to the stigma associated with veterans’ behavioral health issues and the psychopharmacologic adjuncts available for treatment of these behavioral health issues was emphasized. The clinical practicum for the two projects occurred in primary care settings over an 8-week period each semester.

Project Challenges and Lessons Learned

Although IPE and IPCP have been identified as means for improving the education of health professionals and healthcare delivery, there is not one standard approach for implementing these programs. As with many educational projects, the proposed action plans and actual implementation were quite different. IPE programs implementation is a process that requires on-going evaluation and revisions. Recruitment of students to participate in these projects is consistently challenging as the IPE immersion courses are not required and are often non-credit offerings. The majority of health professional programs do not require elective courses and students do not need the extra credits toward completion of their respective degrees. However, all of the health professional programs require clinical practicum hours so participation in the IPE projects assists students in fulfilling clinical placement requirements. Presenting this as an advantage, despite not receiving credit for the IPE immersion courses, has helped in recruitment of students.

Scheduling students for class time and clinical practicum is also a barrier for IPE/IPCP courses. Because each of the health professional programs offered course work on different days of the week, it was challenging to find a time when all students could meet together. One effective strategy implemented has been to keep the same time and day of the week for the immersion courses each semester so that the health professions faculty can plan around the pre-established timeframe. Additionally, the health professions students have different clinical practicum requirements, from eight-week blocks to semester or year-long internships. Finding a block of time when a consistent group of students is available to participate in IPCP teams remains a challenge. To overcome this barrier, all classes and student clinical placements were organized based on the shortest schedule (ie, 8-week block). This facilitated organizing the IPCP teams
and class content into 8-week sessions, with students assigned to longer internships finishing their clinical practicum obligations after the IPE class had ended.

Changes in clinical site partnerships can also be disruptive to IPE/IPCP programs. In one project, a change in the clinical practice site was necessary due to negative clinical experiences reported by several student groups. Other contributing factors include a lack of effective communication with the clinical partner and changes in the philosophy and administration of the clinic. Each of these challenges necessitated student reassignment to a different practicum site to provide a better clinical experience. Changes in key contacts within clinical facilities can also create obstacles for IPE projects. To alleviate the disconnect that occurred with the clinical partner early on in the second IPE project, the project director increased communication with other identified personnel at the practice site and placed a liaison to serve as a point person between the University and clinical partner. The lesson learned here is that open communication channels are essential to the implementation of IPE/IPCP projects in community-based settings.

Disengagement by some project faculty has also created challenges. Students often mimic the behavior of their faculty so when faculty do not fully participate, this sends a negative message to students. To more fully engage faculty, the curriculums for the two projects have been adjusted so that the faculty of each discipline has responsibility for teaching at least one session of the immersion course and serving as the facilitator during class discussions. Feedback from students in the course evaluation has indicated that students have learned to value interprofessional communication when they have observed their faculty role-modeling interprofessional collaboration in class and in clinical experiences.

Critical to the success of these IPE projects is the satisfaction and learning of the IPE content by health professional students. With this goal in mind, perhaps the greatest lesson learned is the need for increased flexibility when designing and implementing community-based IPE/IPCP projects. Despite the well-intentioned plans, there were circumstances that required the IPE faculty to discuss and negotiate solutions to the challenges. When faculty are adaptable and responsive to change, students adapt as well, and learn that flexibility is essential for development of an effective and productive health professional team.

**Summary**

Implementing IPE and IPCP programs across the health professions remains challenging despite increased emphasis on IPE among the nation's health professions schools. Funding to support implementation of IPE/IPCP projects from both the federal and private sectors has made the possibility of an integrated interprofessional healthcare workforce a reality. The health of Americans increasingly becomes more complex and requires educational strategies to better prepare health professional students for delivering safe and effective care as members of collaborative interprofessional teams. Understanding the many challenges in implementing IPE/IPCP community-based programs is an important first step in developing a well-trained interprofessional workforce and in closing the gap between health professionals’ education and clinical practice experiences.

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