

# Interprofessional Education and Collaborative Practice: Are We There Yet?

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## Article Info

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## ABSTRACT

Interprofessional education (IPE) and collaborative practice have been debated for several decades in the health professions. Over that course of time there have been ebbs and flows of interest in IPE and collaborative practice. Health care reform has brought about a renewed interest. IPE is considered an important component in developing collaborative practice-ready health professionals. IPE readiness, effectiveness, and challenges are considerations for successful IPE implementation. Sufficient evidence exists to suggest that faculty and students are motivated to engage in IPE. Knowledge, skills, and attitudes have been shown to improve with IPE interventions. Questions remain, however, about the linkage of IPE to collaborative practice and health outcomes.

## Introduction

Interprofessional education (IPE) has been a focus of discussion by multiple professions for more than 40 years. Significant progress has been made in developing competencies and models to support implementation but full-scale adoption and successful implementation are still emerging.<sup>1</sup> A lack of clarity caused by different interpretations, overlapping and interchangeable terms, and varying definitions serve to hinder effective IPE implementation.<sup>2</sup> The role of IPE is crucial in developing collaborative practice ready health professionals. Collaborative practice occurs when multiple professionals from different health disciplines work together with patients, families, and communities to deliver the highest quality of care.<sup>3</sup> Health care reform designed to increase access to care, improve quality of care, and reduce costs have strengthened the interest and support of IPE and collaborative practice.<sup>4</sup> Complex, chronic diseases, such as chronic obstructive pulmonary disease (COPD) often require management from multiple health professionals.<sup>5</sup>

COPD is a leading cause of death in the US and worldwide. The management of COPD is complicated by multiple comorbid conditions resulting in complex medication regimens and requiring self-management.<sup>6-9</sup> Patient self-management of COPD is an essential component for the provision of high quality care and improving COPD patient outcomes.<sup>10</sup> Collaborative practice supports self-management by creating a patient-centered approach through mutual relationships and shared decision-making between health professionals and patients.<sup>11</sup> In a quality improvement initiative, Saunier<sup>12</sup> showed that the use of collaborative practice to address high hospital readmissions for COPD resulted in nearly a 30% reduction in 30-day readmission rates in the 90 days

after implementation for patients admitted with COPD exacerbation or pneumonia with a secondary diagnosis of COPD. The interprofessional collaborative effort focused on educating team members about COPD and developing tools to provide consistent and effective patient education to improve self-management. In a recent systematic review, Reeves et al.<sup>13</sup> reported collaborative practice may slightly improve clinical efficiency, processes, and patient outcomes when compared to usual care or an alternative intervention. Although, none of the randomized controlled trials included in the review reported patient outcomes suggesting it remains unclear the degree to which collaborative practice improves patient outcomes.

IPE is often considered the precursor to collaborative practice. IPE uses interactive, experiential, and socializing learning experiences in which 2 or more learners from different health disciplines learn about, from, and with each other to improve collaboration and patient health outcomes.<sup>2,3</sup> The use of IPE is a necessary component in preparing health profession students to work confidently and competently in an interprofessional team. Unfortunately, student educational experiences are often isolated to their specific program and do not include other students from different health disciplines,<sup>14</sup> thus creating a silo model of learning. While this approach may be seen as beneficial in developing professional identities, it may have the opposite effect by limiting students' opportunities to learn about each other's roles and responsibilities and gain understanding and mutual respect for each other's contributions to the interprofessional team. Successful IPE implementation takes buy-in from faculty, support from leadership, significant planning, and identified goals and learning outcomes; therefore, IPE readiness, effectiveness, and challenges must be considered.

### IPE Readiness

Successful IPE implementation requires using teaching and learning strategies that create an environment for interactive and collaborative learning between students from different health disciplines. IPE can be integrated into existing courses using common interactive teaching strategies such as small group collaborative learning, case-based learning,<sup>14</sup> problem-based learning, role playing, clinical simulation, deliberative discussion, and guided reflection.<sup>3</sup> However, faculty must be ready to facilitate learning in groups of students from different health disciplines using various interactive teaching strategies.<sup>15</sup> Olenick and Allen<sup>3</sup> conducted a descriptive and correlational study to examine attitudes toward IPE and intent to engage in IPE of 439 faculty from seven different health profession programs. They reported that faculty had positive attitudes and intended to engage in IPE. Attitudes toward IPE were found to be the best predictor to engage in IPE. In addition, faculty participating in the study indicated that their intent

to engage in IPE was influenced by the belief that their colleagues and administrators thought they should engage in IPE. In a smaller study of 285 participants, Vernon et al.<sup>16</sup> reported that respiratory therapy faculty had positive attitudes toward IPE and perceived it as an important component in the curriculum to build communication and teamwork competencies. Faculty reported using IPE teaching strategies such as case studies, clinical, and simulation learning experiences.

Students must be taken into consideration when assessing IPE readiness. Various factors such as attitudes,<sup>17,18</sup> demographic characteristics, and previous experiences may influence IPE readiness.<sup>19</sup> Al-Qahtani<sup>17</sup> conducted a cross-sectional survey research study of 380 undergraduate students enrolled in five different health profession programs. Measured by the Readiness for Interprofessional Learning Scale (RIPLS), students demonstrated positive attitudes and readiness to engage in IPE. In addition, they believed that IPE was essential for all health profession students to develop teamwork skills.<sup>17</sup> Williams et al.<sup>20</sup> showed similar findings with regards to positive attitudes toward IPE among 1,111 students enrolled in eight different undergraduate health profession programs. Students' attitudes towards and readiness to engage in IPE were assessed using RIPLS. Students participating in this study considered shared learning as important to becoming an effective interprofessional team member and improve team communication. These findings suggest that students' attitudes toward IPE are important factors in determining receptiveness to this approach to teaching and learning.

Other studies assessing factors influencing IPE readiness suggest that gender and previous experiences may play a role. Talwalkar et al.<sup>18</sup> found that readiness for IPE was high for 166 students enrolled in graduate health profession programs. Total RIPLS scores indicated that female students, those with advanced degrees, and prior healthcare experience had more positive attitudes toward IPE. In another study investigating factors associated with predicting IPE readiness among 311 students from multiple health profession programs, researchers reported that male students with more clinical experience were less likely to be receptive to IPE.<sup>19</sup> However, in a previous study of 94 students using RIPLS, gender accounted for some differences but not overly influential with regards to receptiveness to IPE as part of an initiative that embedded IPE in a series of learning activities related of universal design for occupational therapy and architecture students.<sup>21</sup> The inconsistencies found may be due to differences in educational programs, cultural influences, and geographical locations.<sup>18</sup>

Overall, the majority of the findings from the different studies assessing IPE readiness among faculty and

students in health profession programs suggested positive attitudes and a high degree of IPE readiness. IPE is often considered an alternative to traditional teaching methods. To sustain positive attitudes and a readiness to engage in IPE, evidence of effectiveness is needed.

### IPE Effectiveness

Effectiveness of IPE has largely been evaluated based on measuring changes in attitudes, knowledge, and skills.<sup>22-24</sup> Lapkin et al<sup>23</sup> conducted a systematic review to determine effectiveness of IPE in university-based health profession programs. The nine studies included in the review indicated positive learning outcomes as a result of IPE interventions and suggested that IPE may enhance positive attitudes and clinical decision-making ability. Although, it was noted that there was insufficient evidence to support long-term sustained benefits. In a larger systematic review of 17 studies, Olson et al<sup>24</sup> found that university-based IPE in health profession programs is feasible and effective using patient scenarios in small groups to improve attitudes toward IPE, teamwork, and understanding the roles of other health disciplines. A more recent systematic review and meta-analysis of 12 studies supported previous findings suggesting that IPE produces positive outcomes in various health professional students by improving knowledge, skills, and attitudes toward collaborative teamwork.<sup>22</sup>

There were a number of single studies that provided additional evidence of IPE effectiveness. Margalit et al<sup>14</sup> described their process of implementing an initial IPE experience in an academic medical center. The IPE learning experience included faculty (30) and students (155) from six different academic health programs using web-based interactive learning modules, a large-group panel presentation, and interactive small group exercises. The Interprofessional Education Perception Scale (IEPS) and RIPLS were used to assess student learning. Students enhanced their knowledge of healthcare quality and interprofessional teamwork and reported having more positive attitudes and expressed a need for additional IPE opportunities. Sergakis et al<sup>25</sup> used clinical simulation IPE learning experiences over one semester with 186 students from eight different health profession programs. Total RIPLS scores and qualitative data indicated that there was improvement in students' attitudes toward teamwork, understanding of professional roles of other health disciplines, confidence in providing patient care, and facilitating effective communication. A more recent, but smaller study, using clinical simulation to facilitate IPE found that students increased their knowledge about the roles and responsibilities of the other participating health disciplines and indicated a greater likelihood of collaborating with these professions in future practice.<sup>26</sup> Soubra et al<sup>27</sup> implemented an IPE course containing 266 senior students enrolled in eight different health profession programs.

The IPE course included foundational workshops, role clarification, patient care planning, and a project. Students worked on assignments individually, in intraprofessional teams, and then in interprofessional teams to complete assignments. Students working in interprofessional teams performed better on assignments compared to working individually and in intraprofessional teams. Students expressed satisfaction with the IPE experience and agreed that it increased their awareness of other health profession roles, readiness to work in interprofessional teams, and improved patient care planning.

### IPE Challenges and Implementation

Faculty and students generally believe that IPE is beneficial and support its use, but successful implementation can have challenges. Factors affecting implementation include differences in preferred IPE delivery methods, the need for additional faculty training in IPE, constraints due to current curriculum requirements, uncertainty of available resources, program level differences,<sup>16,28,29</sup> leadership challenges,<sup>29</sup> variety of students, variation in the concept of IPE, and discipline specific language. Even though challenges may arise, faculty believe that integrating IPE into the curriculum is feasible.<sup>28</sup> Implementing IPE should not be considered a daunting task. Successful implementation of IPE and overcoming many of the challenges can be accomplished by taking the following into consideration:

1. Create an interprofessional collaborative advisory committee that includes faculty, students, and clinical practice sites representing the different health disciplines.<sup>29-31</sup>
2. Identify and use committed champions of IPE to lead the program.<sup>29</sup>
3. Develop IPE learning experiences that require involvement of all the participating health disciplines using commonly encountered procedures and equipment appropriate to different points in the curriculum.<sup>26,31</sup>
4. Establish shared values, expectations, and learning outcomes that all health profession students should meet.<sup>29,31</sup>
5. Design IPE learning experiences collaboratively in an appropriate realistic clinical situation to encourage interaction between the health disciplines to build respect and understanding for the different roles and responsibilities.<sup>31,32</sup>
6. Use simulation and web-based learning activities to design IPE learning experiences.<sup>30,31</sup>
7. Develop IPE training for faculty to build knowledge, skills, and confidence in using effective strategies in facilitating IPE learning experiences.<sup>29-31</sup>

8. Assess IPE learning, competence, and performance with formative and summative evaluation.<sup>31</sup>
9. Evaluate, review, and update curriculum regularly that incorporates input from all stakeholders.<sup>29,31</sup>

Different models for implementing IPE can be used but, regardless of the model chosen, the common goal should be helping students develop a positive professional identity through gaining an understanding and mutual respect for each other's roles and responsibilities on the health care team.

## Conclusion

Lutfiyya et al<sup>33</sup> asked "Where is IPE and collaborative practice?" While there is sufficient evidence to support the readiness and effectiveness of IPE to improve attitudes, knowledge, and skills of health profession faculty and students, it is not clear how far beyond this impact can be linked to collaborative practice and more distally to patient outcomes.<sup>34</sup> IPE and collaborative practice share key elements of accountability, coordination, communication, teamwork, and mutual trust and respect.<sup>30</sup> The 2015 Institute of Medicine report highlighted the value of collaborative practice and elevated the profile of IPE as a step toward building a strong evidence base linking IPE to collaborative practice and improved patient outcomes.<sup>34</sup>

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The author reports no conflicts of interest, financial or otherwise.

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