A Unique Interprofessional and Multi-Institutional Education Series

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A Unique Interprofessional and Multi-Institutional Education Series
Deborah Poling, PhD, RN, FNP-BC, CNE; and Mary Kiersma, PhD, PharmD

ABSTRACT

Interprofessional health education has received increased attention from educators and health care institutions over the past decades. In the Institute of Medicine’s The Future of Nursing: Leading Change, Advancing Health report, the necessity of nursing professionals becoming full partners with other health care professionals is described. In 2011, a group of faculty members in northeast Indiana formed an interprofessional education (IPE) consortium, which included faculty from several universities. The members were from a larger community group who met monthly and realized they shared a common interest in developing an IPE program. The purpose of this article is to describe the unique interprofessional and multi-institutional educational series that has been offered as a result of the collaborative efforts of this consortium. The initiative is continuous and now enters the second phase of the IPE learning series. This initiative may help others make the necessary changes in health care education. [J Nurs Educ. 2014;53( ):xxx-xxx.]
TABLE 1

**Recommendations for Transforming Health Care**

<table>
<thead>
<tr>
<th>Education and health care needs to involve patients, families, and populations to link IPE and collaborative practice in health care</th>
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<tbody>
<tr>
<td>Move quickly to implement models of health care delivery that promotes IPE and collaborative practice</td>
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<tr>
<td>Reform education and lifelong learning to include interprofessional practice</td>
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<tr>
<td>Revise professional regulatory standards to permit and promote IPE and sustain a link between IPE and practice</td>
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<tr>
<td>Triple aim of better health care</td>
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<tr>
<td>Improving the patient’s health care experience</td>
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<tr>
<td>Improving the health of patients and populations</td>
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<td>Reducing health care costs</td>
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*Note. IPE = interprofessional education.*

*Summaryed from the Josiah Macy Jr. Foundation conference proceedings.*

learners achieve the learning objectives within the four domains before becoming licensed or certified in their respective disciplines. The goal of the IPEC continues to be one of enhancing patient safety through high quality, accessible, patient-centered care (IPEC Expert Panel, 2011).

Another influential group dedicated to enhancing health care by improving health care education is the Josiah Macy Jr. Foundation. This group of professionals met in January 2013 to develop recommendations for transforming health care. The participants made several recommendations about how health care education and practice can work together to change the complexion of health care. These recommendations are of equal importance and support one another. The conference participants all agreed that these guidelines are necessary to achieve the triple aim of better health care, which many health care leaders describe as better care leading to improved health at a lower cost (Josiah Macy Jr. Foundation, 2013). Highlights from the January conference are outlined in Table 1.

Another noteworthy organization that recognizes the importance of IPE is the World Health Organization (WHO). The WHO recommends that IPE begins at the earliest stages of health care professional education. Interprofessional collaboration provides the opportunity for optimal patient care, which is gained through early and frequent exposure to interactions with other disciplines (WHO, 2010).

Although the list of organizations described in this article is not inclusive, it represents the more prominent groups that recognize the need for IPE and collaborative practice to enhance health care.

Historically, nursing students have limited experiences collaborating and learning together with other health care professions (Curan, Sharpe, Flynn, & Button, 2010). Health care reform, specifically the Patient Protection and Affordable Care Act (HHS.gov/HealthCare, n.d.), has increased the need for more providers to work collaboratively with one another to decrease medical errors and to increase communication. Teaching diverse health professions students to work in teams, communicate, understand each other’s roles and responsibilities, and effectively collaborate are imperatives for creating a practice-ready workforce (Pardue, 2013).

IPE has been described as a tool to link health education to clinical practice by such IPE leaders as George Thibault of the Josiah Macy Jr. Foundation (Thibault, 2011). Currently, there is a wide consensus among health care educators and practicing clinicians for creating opportunities for health professions students to learn together. The following section describes some current IPE initiatives that are found in the education and clinical practice literature.

**IPE Initiatives**

Delivery of IPE to large numbers of students across different curricula and universities can be difficult for various reasons, such as scheduling, lack of funding, and administrative challenges (Hays, 2007). Providing students with the opportunity to learn by completing brief modules or workshops can be effective in introducing factors related to interprofessional teamwork. The School of Health Studies at The University of Bradford, England, offered a course that enrolled 354 students from five professional groups in one first-semester module. Students were placed into interprofessional groups of nine to 10 students each. Students completed online discussions about a real patient problem and then met face to face with their assigned group to continue the discussion. Students then posted their thoughts about the activity, with one student collating the feedback, and shared with the whole class at another face-to-face meeting. After the workshops were completed, students were interviewed about the learning experience. Students reported a lack of learning about the roles of other professions but did think that their team-building and communication skills improved (Owens, Dearley, Plews, & Greasley, 2010).

Cusack & O’Donoghue (2012) also found that their students agreed that collaboration and building good communication skills with colleagues improved and was valuable. Nursing, medicine, physiotherapy, and diagnostic imaging students elected to take an IPE module that was offered over a 12-week semester. The evaluation of the module included both a quantitative and qualitative questionnaire. The qualitative section focused on a survey about the overall satisfaction of the module. The qualitative section asked open-ended questions regarding enhanced understanding of collaboration and problem-based learning with other health care professionals. Students reported the ability to identify the link between IPE, patient care, and enhanced outcomes in clinical practice.

Pardue (2013) described a community-based IPE curriculum that was implemented with undergraduate exercise science, exercise training, dental hygiene, nursing, and preoccupational therapy students. The goal of the IPE curriculum was to prepare students to perform discipline-specific roles, as well as to lead teams of interprofessional caregivers. Students completed three IPE courses during their freshman and sophomore years. The first-year courses included communication, teamwork, and examination of the roles of members of the health care team.
The second-year course included the study of evidence-based practice and interprofessional ethics and how teamwork supports better patient outcomes.

Students worked as members of an interprofessional team to develop a plan of care for a population-based problem (e.g., obesity, smoking). During the junior and senior years, students worked in interprofessional teams to care for patients in the clinical setting, with ongoing instruction from their faculty. Clinical evaluation tools included the learning objectives from the IPEC core competencies.

Students described an increased understanding of the importance of team and communication, as well as the ability to appreciate the roles of the various health care professionals. That program is a work in progress, and future articles will report evaluation findings (Pardue, 2013).

The IPE initiatives described have reported prominent themes from student evaluations. Students gained an understanding of one another’s professional roles and increased their team building skills. Each program included ongoing activities that have been supported in the literature as a more effective way to increase IPE learning (Cusack & O’Donoghue, 2012; Hays, 2007; Owens et al., 2010; Pardue, 2013).

Barriers to effective programing are common for most IPE educators. Scheduling difficulties among the disciplines due to calendar conflicts are challenging. Lack of funding for activities limits student options. Other administrative challenges, such as facility space, can limit the number of participants (Hays, 2007). Some of these challenges and how they were addressed by educators involved in an ongoing interactive interprofessional initiative are described in the next section. The IPE is unique for a variety of reasons but primarily because of the collaborative efforts by several universities and health care disciplines.

### Fort Wayne Area Interprofessional Education Consortium

**Background**

The unique Fort Wayne Area Interprofessional Education Consortium was formed in northeast Indiana in 2011 by combining five distinct graduate and undergraduate health care education institutions representing the following programs: pharmacy, physician assistant, nurse practitioner, nurse educator, nurse executive, medical student, and family practice residency. This IPE consortium formed when members from a larger community group, who met monthly to collaborate about health care research projects in the area, realized that they shared a common interest in developing IPE programs.

An IPE seminar series was the first program that the group planned and implemented, with the overall goal of providing a longitudinal team-building experience leading to competency in interprofessional collaborative practice. The three educational sessions and logistics are described below (LaBarbera, Kiersma, Yoder, Maldonado, & Poling, 2012).

**Educational Sessions**

During the first session, the registered students and faculty were randomly assigned a group number. Ten members were in each group. These individuals remained with the same group for all three sessions. Students completed a pretest Readiness for Interprofessional Learning Scale (RIPLS) assessment (Reid, Bruce, Allstaff, & Mclernon, 2006). A light meal was served, during which the IPE was introduced and defined. The participants met in their designated group and engaged in an activity where they were assigned different health care professions careers to investigate, identifying the qualifications, educational requirements, and roles of their assigned careers. They used portable mobile devices to search the Internet for the information. The group members discussed the information they located and then summarized that information. Each group selected a spokesperson. All groups gathered as a large group, and each spokesperson reported on the results of their group regarding their assigned health care professionals’ role.

After a light dinner, session two began with an educational period that was presented by a psychologist who explained the BATHE (Background, Affect, Trouble, Handling, and Empathy) model of psychosocial interviewing. Interview questions were guided with using the BATHE model. The BATHE interviewing technique was developed initially for primary care providers to help elicit information from patients while exhibiting empathy in the communication. The consortium selected the BATHE model because communication is one of the defined IPEC competencies, because an expert psychologist familiar with the model can serve as a facilitator for the session, and because family practice medical residents are already following this model, so the approach to interviewing would be consistent across all disciplines.

Students gathered in their assigned groups to practice interviewing one another in a role-play activity. Students were provided with laminated card images of individuals. On the reverse side of the laminated image, a brief description was provided of what the individual represented. Examples included a homeless person, a student, and a retired school teacher. Students took turns role-playing. Each student role-played the patient, the provider, and the observer.

The interviewer applied the concepts of the BATHE model to the discussion. Students provided feedback to one another. When the activity was completed, the small groups returned to the larger lecture hall, and the spokesperson for each team reported to all about what they learned during the session. The clinical psychologist was available to answer participant questions about the interview process (Searight, 2009).

The third and final session of the series followed the same format as the first two sessions. The root cause analysis (RCA) method of problem solving was introduced at the beginning of the session, using a case study approach (Fassett, 2011). RCA is a reflective assessment that is used to determine reasons for why a potentially harmful mistake almost occurred. RCA assessment is a system analysis that includes review of personnel, procedures, equipment, materials, and environment. In reviewing these parts of the system, one looks at what went wrong and why, what can be done to prevent the problem in the future, and how the system can be changed to prevent the event from happening again. In health care, RCA is an important part of patient safety programs (Fassett, 2011).

The students met in their assigned groups to discuss the case study of Lewis Blackman, a young teenager who died after a...
routine surgery, primarily as a result of lack of collaboration among health care team members (QSEN Institute, 2010). Problem-solving discussion questions included identifying potential factors needed to be considered in relation to optimal patient care and safety.

Students developed a priority-ranked list of factors to be addressed to avoid such an outcome in the future, which were presented by the team spokesperson to all participants. Common themes that emerged included poor communication, lack of collaboration, and accountability. A posttest RIPLS was administered to the students at the end of the last session.

Table 2 describes the educational sessions, objectives, and activities.

The faculty planning committee evaluated the program after the series was completed. The group developed a list of lessons learned and components of success. One of the potential barriers to providing IPE programs such as the one described is the difficulty in scheduling around the different academic calendars of each discipline. Each university has an established academic calendar, and this led to scheduling challenges. Random assignment of individuals to teams for collaboration was difficult because the disciplines were not evenly represented.

Initially, the program did not receive as much support from colleagues until they realized the importance of the project. When university administration began showing support, the faculty realized the impact the series has on student learning.

Components of success included collaboration among faculty and schools to develop the curriculum, participate as facilitators, and share expenses and hosting the events. The education series has been such a success that other disciplines have asked to be included in upcoming sessions.

### Table 2

Fort Wayne Area IPE Consortium Education Series

<table>
<thead>
<tr>
<th>Educational Session</th>
<th>Session Objective</th>
<th>Session Activity</th>
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| One: Exploring health professions | - Define interprofessional education  
- Describe the goals and associated elements of interprofessional education  
- Explain why interprofessionalism is important for patient-centered care  
- Express the motivation, intention, and necessity for incorporation of interprofessional education  
- Collaborate with other health professionals to explore health care and related professions  
- Discuss interprofessionality how health professionals and patients may utilize and understand the role of various providers and services | - Pretest RIPLS  
- Food  
- Mini lecture to introduction of IPE and faculty  
- Created interdisciplinary teams  
- Research a health care member as a team  
- Debrief to all participants |
| Two: BATHE model | - Apply the elements of the BATHE communication model to a mock patient interview  
- Self-assess a mock interview and respectfully critique team members, using an established rubric that includes establishing rapport, displaying empathy, using verbal and nonverbal communication skills, encouraging patients to share concerns, and patient-centered interviewing including answering questions in an informative, respectful and nonjudgmental manner | - Clinical psychologist explains BATHE model  
Laminated cards were provided to the learners that summarized the BATHE questions  
- Learners within the triad provided feedback to one another about the rapport developed with the patient during the role-play  
- Large-group debriefing to summarize events and for a question and answer session with the expert psychologist |
| Three: RCA | - Retrospectively apply the elements of the RCA model to a real patient scenario  
- Delineate the issues associated with a scenario using a fishbone diagram  
- Develop potential solutions by identifying factors associated with a scenario  
- Apply and improve personal communication skills to convey and accept professional knowledge as part of an interprofessional team  
- Demonstrate principles and values of team dynamics to successfully function in various team roles | - Students apply RCA to a scenario  
- Deliberate as a team about the issues surrounding the case  
- Create a solution and present the problem and solution to other groups  
- RIPLS posttest |

Note. IPE = interprofessional education; RIPLS = Readiness for Interprofessional Learning Scale; BATHE = Background, Affect, Trouble, Handling, Empathy; RCA = root cause analysis.
Discussion

The seminar series curriculum is beginning its third academic year. The consortium is expanding its curriculum offerings based on the success of the seminar series. The curriculum initially targeted students from pharmacy, physician assistant, nurse practitioner, nurse educator, and nurse executive programs and medical students and family practice residents from five different universities. A pretest–posttest was conducted using the RIPLS evaluation tool, which was first published in 1999.

The RIPLS was selected as an assessment tool due to one consortium member’s experience using the tool previously. Due to the lack of tools available to assess IPE, the RIPLS was used to gather knowledge concerning the readiness to engage in IPE. The RIPLS results did not significantly indicate that students gained an appreciation of collaboration or an enhanced understanding of each other’s roles. This was contrary to the verbal accounts shared by students who defined their learning on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The questions are related to teamwork and collaboration, negative professional identity, positive professional identity, and roles. Many researchers have used the RIPLS with the belief that the tool has good evidence of content validity; however, in recent years, the RIPLS has come under criticism for a lack of reliability, and researchers continue to develop a tool that measures IPE effectiveness (McFadyen, Webster, & Maclaren, 2006).

The RIPLS was selected as an assessment tool due to one consortium member’s experience using the tool previously. Due to the lack of tools available to assess IPE, the RIPLS was used to gather knowledge concerning the readiness to engage in IPE. The RIPLS results did not significantly indicate that students gained an appreciation of collaboration or an enhanced understanding of each other’s roles. This was contrary to the verbal accounts students shared with faculty. In debriefing sessions, students shared that they gained an understanding of each health profession’s roles and the contribution each provided to improve patient care. These contradictory results could be based on what the RIPLS was designed to evaluate. The RIPLS was developed to assess readiness to engage in interprofessional learning, whereas this educational series had specific outcomes, which did not include readiness to engage in IPE. Because the RIPLS did not mimic the verbal accounts of the students, faculty have developed a new assessment tool to evaluate the education series outcomes.

All disciplines involved in this initial series of IPE activities agree that interprofessional collaboration helps to prepare students for the real world of health care; however, the process is not an easy one. The group has experienced some logistical challenges of implementing IPE that are described in the literature. These challenges include differing academic calendars, inadequate funding, and initial lack of administrative support. As a result, the consortium has been creative regarding future plans and provided rationale that has led to more academic support. Future plans include a second-year curriculum, with an expanded number of activities, service-learning activities; increased student leadership in interdisciplinary groups, including additional disciplines, such as radiology and dental education; and increased student representation in planning sessions.

Conclusion

Health care is changing in significant ways, and the next generation of clinicians will need to be prepared for such changes. IPE, interprofessional collaboration, interprofessional teams, quality improvement, and population health are becoming increasingly important. The shape of the health care workforce is moving toward more collaborative models of patient care. Mutual respect and understanding of roles and responsibilities are essential for effective collaborating and teamwork, with hopes of improved quality care (Evans, Henderson, & Johnson, 2012).

The community consortium interactive modules described are only the beginning of the work planned by this innovative, unique group of health care professionals and educators. Modeling at the local level is critical for successful IPE. The work must not be postponed because, ultimately, patients will suffer (Griffin-Sobel & Storey-Johnson, 2013). The need for educational experiences for future health care providers in an interprofessional setting is essential to the future of health care in the United States (Duley, Fitzpatrick, Zornosa, & Barnes, 2012).

Few studies exist that examine the effects of IPE on learner-based outcomes that include control groups and objective outcome measures. The Fort Wayne Consortium plans to implement the second phase of the IPE learning modules, with careful assessment throughout the process. As mentioned earlier, a new tool is being developed, with the hope to provide the best methods to assess attitudes, perception, and reflection toward interprofessional care. Subsequent articles will be published about the results obtained during the second-year pilot study. Hopefully, this initiative and others will help to change the way students are educated to better serve the health care needs of the world’s changing population.

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Evans, J.L., Henderson, A., & Johnson, N.W. (2012). Interprofessional learning enhances knowledge of roles but is less able to shift attitudes: A case study from dental education. European Journal of Dental Education, 16, 239-245. [QUERY #3: Please clarify your correction to delete this reference, as it is not different from the one you provided.]

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