

# Interprofessional collaboration: three best practice models of interprofessional education

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Interprofessional education is a collaborative approach to develop healthcare students as future interprofessional team members and a recommendation suggested by the Institute of Medicine. Complex medical issues can be best addressed by interprofessional teams. Training future healthcare providers to work in such teams will help facilitate this model resulting in improved healthcare outcomes for patients. In this paper, three universities, the Rosalind Franklin University of Medicine and Science, the University of Florida and the University of Washington describe their training curricula models of collaborative and interprofessional education.

The models represent a didactic program, a community-based experience and an interprofessional-simulation experience. The didactic program emphasizes interprofessional team building skills, knowledge of professions, patient centered care, service learning, the impact of culture on healthcare delivery and an interprofessional clinical component. The community-based experience demonstrates how interprofessional collaborations provide service to patients and how the environment and availability of resources impact one's health status. The interprofessional-simulation experience describes clinical team skills training in both formative and summative simulations used to develop skills in communication and leadership.

One common theme leading to a successful experience among these three interprofessional models included helping students to understand their own professional identity while gaining an understanding of other professional's roles on the health care team. Commitment from departments and colleges, diverse calendar agreements, curricular mapping, mentor and faculty training, a sense of community, adequate physical space, technology, and community relationships were all identified as critical resources for a successful program. Summary recommendations for best practices included the need for administrative support, interprofessional programmatic infrastructure, committed faculty, and the recognition of student participation as key components to success for anyone developing an IPE centered program.

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Today's patients have complex health needs and typically require more than one discipline to address issues regarding their health status (1). In 2001 a recommendation by the Institute of Medicine Committee on Quality of Health Care in America suggested that healthcare professionals working in interprofessional teams can best communicate and address these complex and challenging needs (1, 2). This

interprofessional approach may allow sharing of expertise and perspectives to form a common goal of restoring or maintaining an individual's health and improving outcomes while combining resources (1, 3).

Interprofessional education (IPE) is an approach to develop healthcare students for future interprofessional teams. Students trained using an IPE approach are more likely to become collaborative interprofessional team

members who show respect and positive attitudes towards each other and work towards improving patient outcomes (3–5).

### What is interprofessional collaboration and practice?

According to the Canadian Interprofessional Health Collaborative, interprofessional collaboration is a ‘partnership between a team of health providers and a client in a participatory collaborative and coordinated approach to shared decision making around health and social issues’ (6). Interprofessional collaborative practice has been defined as a process which includes communication and decision-making, enabling a synergistic influence of grouped knowledge and skills (7). Elements of collaborative practice include responsibility, accountability, coordination, communication, cooperation, assertiveness, autonomy, and mutual trust and respect (7). It is this partnership that creates an interprofessional team designed to work on common goals to improve patient outcomes. Collaborative interactions exhibit a blending of professional cultures and are achieved through sharing skills and knowledge to improve the quality of patient care (8, 9).

There are important characteristics that determine team effectiveness, including members seeing their roles as important to the team, open communication, the existence of autonomy, and equality of resources (9). It is important to note that poor interprofessional collaboration can have a negative impact on the quality of patient care (10). Thus skills in working as an interprofessional team, gained through interprofessional education, are important for high-quality care.

### What is interprofessional education?

IPE has been defined as ‘members or students of two or more professions associated with health or social care, engaged in learning with, from and about each other’ (4, 11). IPE provides an ability to share skills and knowledge between professions and allows for a better understanding, shared values, and respect for the roles of other healthcare professionals (5, 11, 12). Casto et al. described the importance of developing early IPE curricula and offering them before students begin to practice in order to build a basic value of working within interprofessional teams (13, 14). The desired end result is to develop an interprofessional, team-based, collaborative approach that improves patient outcomes and the quality of care (5, 15).

In this paper we showcase three exemplary models of collaborative and interprofessional educational experiences so that other institutions may benefit from these when creating interprofessional curricula.

## Models of interprofessional collaborative student experiences

### *Rosalind Franklin University of Medicine and Science: HMTD 500 Interprofessional Healthcare Teams course*

Rosalind Franklin University of Medicine and Science (RFUMS) has responded to the challenge of interprofessional training by designing a one-credit-hour, pass/fail course called HMTD 500: Interprofessional Healthcare Teams (2, 16). The course is a required experiential learning opportunity where students interact in interprofessional healthcare teams. Students focus on a collaborative approach to patient-centered care, with emphasis on team interaction, communication, service learning, evidence-based practice, and quality improvement.

The course, which was instituted in 2004, spans the months of August–March every year, and has evolved into three separate components each with its own course director: a required didactic component (Table 1), a required service learning component, and a clinical component with limited enrollment.

During the course, all first-year students (approximately 480) are grouped into 16-member interprofessional teams. Each team has student representation from allopathic and podiatric medicine, clinical laboratory, medical radiation physics, nurse anesthetists, pathologists’ assistants, psychology, and physician assistants. Each team has a faculty or staff member, with a minimum of a master’s degree, serving as a mentor. Mentors are trained prior to each class, and the lunch hour of every class day is set aside for mentors to review material and ask questions if necessary.

#### Didactic component

During the didactic phase, students attend nine 90-minute interprofessional small group sessions, currently held every Wednesday afternoon. Five sessions are

*Table 1.* RFUMS HMTD 500 interprofessional healthcare teams course objectives

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1. Demonstrate collaborative interprofessional team characteristics and behavior
  2. Analyze a healthcare interaction for qualities of patient-centered care
  3. Reflect on service learning as a way to demonstrate social responsibility
  3. Identify other healthcare providers that may be of benefit to a particular patient
  4. Analyze a medical error situation to formulate a suggestion for solving the problem
  5. Identify situations in which individual, institution, or government advocacy may be appropriate
  6. Discuss current issues that impact all healthcare professions
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devoted to the learning concepts of interprofessional healthcare teams, collaborative patient-centered care (functioning as a collaborative team), service learning and county health assessment, healthcare professions (a time to learn about their own health profession), and error cases and advocacy.

The remaining sessions are set aside for discussion, preparation, presentations, and celebrations of achievements. Student objectives, case studies, and role-play are used to develop discussion. Two different students volunteer each session to moderate the class to develop their own leadership and communication skills. All course materials are loaded into our information management learning system.

### Service learning component

Students are tasked with working as an interprofessional team to identify a community partner and engage in a community service project. Each team is expected to perform a service learning project. One of the original five sessions is designed to allow students time together to discuss ideas for their projects. Students assess local community needs in their didactic phase and are given a list of community projects performed in the past to help them decide on a project and partner. Two additional sessions allow them to plan their projects and subsequently design a poster which showcases their service learning experience and reflection. The focus of student projects is prevention education in the form of physical fitness training, nutrition education, health screening, or instruction in making healthy choices.

Service learning allots time for students to process what they learned about their community: how their knowledge was used to help meet the needs of the community and how they better understand them as a result of this activity (17). All HMTD 500 students complete a reflection form.

The last session of the course culminates each year with a group reflection and a celebration poster day where our community partners are invited to visit the university to review the work our students have accomplished. Community partners see posters created by each team and are invited to join their student groups to reflect upon the service learning project and share with the students how the project impacted their organization.

The collaborative interprofessional prevention education service learning projects have been very rewarding and well accepted by our community partners and students, as noted by student surveys and focus groups and awards received from some community partners. Student attitudes were positive regarding this aspect of the course. Post-course survey indicated a majority of respondents agreed or strongly agreed with statements regarding collaboration, teamwork, social responsibility, and diversity (18).

### Clinical component

The third component is a clinical experience offered to interested students. Three students from different professional programs such as physician assistant, physical therapy, and podiatry form an interprofessional team and attend four sessions at a clinical site. This helps put their didactic knowledge into actual patient care practice. Approximately four teams are created: as more clinical sites agree to accept students, more groups will be formed each year (Table 2).

### Phase II – HMTD 501 Culture in Healthcare

RFUMS promotes teaching students the importance of the impact of culture on healthcare and its delivery. A second one-credit course entitled HMTD 501 Culture in Healthcare was developed to accomplish this goal (Table 3). Students remain in their same HMTD 500 interprofessional groups, and class sessions for this course are interwoven with the HMTD 500 course dates. There are two main projects in this course: the proposal of an education tool and performing a patient interview.

To complete the education tool assignment students work in interprofessional teams within each group to present a proposal summary for a culturally appropriate patient education tool. Students identify a specific health

*Table 2.* RFUMS clinical component sessions

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#### Session 1 (two hours)

The assigned groups of students attend a two-hour session to observe patients at the clinic, have an interprofessional discussion after each, and choose one patient to follow

#### Session 2 (one hour)

Each group of students meets to discuss the patient history and their responses to the five interprofessional questions discussed in the clinic

1. How will medicine, physical therapy, physician assistant practice, and podiatric medicine contribute to the care of this patient?
2. What would the treatment objectives be for that care?
3. How would your profession address these objectives? What is the evidence to support the methods used to address the issue?
4. Besides medicine, physical therapy, physician assistant practice, and podiatric medicine, which other professions would you collaborate with to assist this patient? What is your rationale for these collaborations?
5. What other information will you need from the patient and how will it guide the treatment?

#### Session 3 (30–60 minutes)

Each group of students returns to the clinic for a follow-up appointment with the chosen patient

#### Session 4 (one hour)

All four groups of students meet over lunch with the three course coordinators and present their patient and responses to the interprofessional questions: due to available sites to perform this clinical component, enrollment is currently limited, but we are actively seeking additional clinical sites so we can eventually offer this experience to all students

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**Table 3.** RFUMS cultural course objectives

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Discuss the scope and definition of culture
Examine one's own ethno-cultural heritage and how it impacts his/her interactions with patients, clients, and co-workers
Analyze one's own personal and professional stereotypes and prejudices
To interpret the world of healthcare is a culture in itself
Become familiar with disparities in healthcare and aware of government involvement in this issue
Identify and discuss the impact of barriers to healthcare
Apply concepts related to the impact of culture, ethnicity, and religion on the health beliefs, practices, and behaviors of patients and clients

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conditions impacted by cultural beliefs and practices for a selected target group. They are asked to recognize the role that culture plays in health beliefs and practices and the specific impact culture has on health outcomes. Students propose patient educational materials for the prevalent identified health conditions for the selected target group. They then present their proposals to their peers.

To complete the patient interview, student groups (including third- and fourth-year students who are in their clinical years) work with facilitators for a class session (trained interpreters and nurse anesthesia students). The university community volunteers as patients. The scenario of a patient with a 'pre-diabetes' condition is used for the interview. Students are asked to discuss laboratory findings, collect historical and lifestyle information, and elicit a cultural history. Students then have a post-interview reflection assessment with their mentors to discuss their communication and cultural sensitivity skills and to identify best approaches for culturally sensitive and appropriate patient interactions.

At the end of each HMTD 500 and 501 course, focus group meetings are held with mentors and another with students to obtain feedback. Changes are made to the curriculum for improvement based on this. Student focus groups yielded positive comments that working in small groups promotes teamwork and teaches them about the communication process (18).

### University of Florida

#### Interdisciplinary Family Health

The Interdisciplinary Family Health (IFH) course has been providing interprofessional community-based learning experiences for over 10 years. Based in the Office of Interprofessional Education within the Office of the Senior Vice-President for Health Affairs, it is a required course for all first-year students in the Colleges of Medicine, Dentistry, and Pharmacy, the accelerated and traditional nursing students in the College of Nursing, the physical therapy and clinical and health psychology students from the College of Public Health and Health Professions, and the nutrition graduate students from the

Institute for Food and Agricultural Sciences. Students from the College of Veterinary Medicine participate as volunteers (19). A core faculty representing each of the involved Health Science Center colleges helps set policy for the course. Grading of the course is centralized, but the grading status of the course is determined by each college. In dentistry and pharmacy the course is part of a larger first-year course in terms of credit. In the Colleges of Medicine and Nursing it is a stand-alone course. The development of the Office of Interprofessional Education and the course are described elsewhere (20). However, in summary the office is supported by money from each of the participating colleges. This institutionalization of the office and course was essential to its success. The office is charged with facilitating and supporting multiple cross-college curricular developments in addition to the IFH course, but it represents the most widely integrated effort to date. Over 3,500 students have completed the course, which resulted in almost 8,000 home visits serving over 500 families from the Gainesville area.

The course lasts for two semesters and is based upon four home visits, two per semester, with volunteer families in the local community. Approximately 60 per cent of the families are underserved. Each family is visited by an interprofessional team of three students. Four of these teams make up a small group, which is supervised by two interdisciplinary faculty members. The distribution of families to groups is not random; the goal is to provide a rich diversity of family types to each small group, because the groups learn a considerable amount about each of the four teams' families. One group may include a Medicaid family with multiple children, a single elder living alone, a retired university faculty couple, and a hospice patient. All families sign Health Insurance Portability and Accountability Act (HIPAA) releases at the time of their recruitment into the program.

The small groups meet six times during the year, in two-hour sessions. They are responsible for different tasks, learning objectives, and responsibilities on each visit. The 'raw material' for the course thus requires around 615 students, 125 faculty members, 200 families and 50 meeting rooms. All group meetings are held at the same time, as each college has made this time available for IPE. Home visits are scheduled by team members, who contact the family and arrange an appropriate and mutually convenient time.

#### Course content

Our goals for the course are primarily to demonstrate to students the significant impact of environment and resources on health status, and emphasize the importance of interprofessional collaborative effort in providing services to patients. The overall competencies and learning objectives are shown in the appendix. Each objective is evaluated by being linked to a course assignment. The



competencies are in three major categories: patient care, interpersonal and communication skills, and professionalism. The assigned tasks for the course are designed to allow the students to implement learning activities they have been taught in their didactic coursework. For instance, all colleges teach students about taking a family history or genogram, and during the first home visit students are required to develop a genogram for their family. Students who are taught to do vital signs are expected to take vital signs of the family members.

Assignments vary by visit. After every home visit, each student submits a report that describes the visit from the student's perspective. For the first home visit, students are asked to submit a family genogram and a 'windshield survey' which describes the neighborhood in which the family resides, including access to drug and grocery stores, an assessment of the safety of the location, and other information that is to be filled out when the students are driving to their visit. At the second visit, students fill out an extensive health survey that assesses the family's health status, resources, and health behaviors. After that visit, student teams develop a project that will hopefully positively address the family's health status in some way. This could be preventive (such as an exercise program for weight loss); social (arranging experiences and aid for single elders); economic (helping families enroll in Medicaid or other assistance); or educational (teaching families about their medical and/or socio-behavioral concerns). At the third group meeting, a social worker attends each meeting and provides assistance to the teams with regard to access to resources.

A variety of required reading and discussion questions are also assigned and discussed during the meetings. These address such appropriate topics as definitions of family, techniques specific to family interviewing, caring for the poor, issues of adherence and compliance, and healthcare teams and communication.

During the spring semester the teams present their projects to the family, and the last home visit is to determine the effectiveness or acceptability of the project from the family's perspective. This coming year, for the first time, we are adding content concerning the collaborative aspects of patient safety education.

At the conclusion of the course, teams submit their family project to their group. This can be done as a PowerPoint presentation, video, poster, or a written/oral presentation. The project is done as a team, but all students must submit a reflection paper discussing various aspects of their participation in the course and its impact on their development as a health professional. Extensive online evaluations of the students and faculty have taken place over the years, as an entire course and by discipline.

It is important that we clarify a crucial part of our program: because the supervising faculty include a range

of disciplines, and the faculty rarely if ever meet the family directly, we are *not* providing medical, nursing, dental, or pharmaceutical care to these families, although the students may help arrange such services.

### Future

Based on evaluations and faculty feedback, we make changes in the course each year. Because our overarching goal is to have interprofessional learning experiences in all years of training, we have been working towards ways to keep the groups together beyond their first year. This meets with challenges because the traditional nursing, physical therapy, and clinical psychology students have a two-year curriculum, while pharmacy, medicine, and dentistry have four-year programs. A committee composed of the education deans from all six colleges has developed a common set of interprofessional competencies for all students. Newly developed interprofessional coursework based on these competencies will be required for all students.

### University of Washington

The University of Washington is home to six health professions schools – medicine, pharmacy, nursing, social work, public health, and dentistry – and includes the sole allopathic medical school for the states of Washington, Wyoming, Alaska, Montana, and Idaho (known as WWAMI). In 1997 the university established the Center for Health Sciences Interprofessional Education (CHSIE), in an effort to integrate better the teaching, research, and professional activities of these health science schools, the information school, and the health sciences libraries. The CHSIE was developed through grant support from the University Initiatives Fund (21–24). To date, over 2,300 health sciences students have participated in formal IPE programs offered through the CHSIE.

The course catalog for the University of Washington includes more than 50 collaborative interprofessional offerings for students in the health sciences, ranging from issues in treatment of alcoholism to care for medically underserved populations. The existence of these courses, and support for them, provides a platform from which students from diverse health profession programs can learn 'with, from, and about' each other, outside of their program 'silos.' In addition to the integrated coursework, co-curricular service learning and experiential training activities are available. Because healthcare is typically provided by teams, the opportunity to establish strategic teams of learners has been well received by collaborating students, faculty, clinical practice sites, and community organizations, promoting sustainability of these efforts.

### Experiential training programs

#### Interprofessional team simulation

A clinical team training and skills assessment simulation is currently in development at the University of Washington for integration into the core curricula of the Medex, medicine, nursing, and pharmacy programs through a grant from the Josiah Macy Foundation, using simulation to promote interprofessional teamwork. In this project, interprofessional student teams collaborate to provide urgent care to simulated patients. The simulated cases involve an acute asthma exacerbation in an emergency room setting, a serious cardiac arrhythmia in an intensive care setting, a patient presenting to an urgent care setting with acute shortness of breath, and two cases involving disclosure of medical errors. Content primers using web-based reviews and recorded presentations are available in preparation for the simulations, along with appropriate orientation to the simulation tools (e.g., mannequin, crash cart, monitoring devices). Curricular mapping has been conducted to identify ideal timing of the simulations in each program to ensure sustainable curricular integration and comparability in student clinical preparation for participation. The objectives of the simulations are both formative and summative, allowing participants to practice and demonstrate team-based skills including communication, mutual support, leadership, and situational monitoring (25). To receive a pass score, students participate in the training simulations and demonstrate acceptable performance in the summative assessment simulation. In summer 2010 beta testing of cases took place, with 24 students participating in the human patient emergency cases simulator and 20 students in the error disclosure standardized patient simulation. A common set of IPE competencies (Table 4), based on learning objectives and competencies published by the Halifax Nursing Association, the CHSIE, and the TeamSTEPPS model, were used to guide development of the simulation (21, 25, 26).

**Table 4.** University of Washington IPE competencies

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Respects the roles and approaches to clinical and social problems of one's own and other disciplines
Consults with others when outside his/her personal or professional expertise
Collaborates effectively with others to assess, plan, provide, and review care that optimizes health outcomes for patients
Collaborates effectively with other health professionals in a variety of venues and practice settings
Raises issues or concerns that may jeopardize patient outcomes with other team members
Demonstrates consensus building and appropriate negotiation/conflict management skills in resolving issues and concerns
Fulfills roles as either a designated or situational team leader
Assists in identifying and overcoming barriers to interprofessional collaboration

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#### SPARX (student providers aspiring to rural and underserved experience)

The SPARX program was developed in 1994 as an interprofessional co-curricular (outside the classroom) opportunity (27). The goal of SPARX is to provide health science students with a variety of co-curricular activities, including exposure to successful practitioners who serve rural and medically underserved populations. A SPARX steering committee composed of staff and faculty from the health science schools created the infrastructure to link the schools around the program and, in 1996, the WWAMI Area Health Education Center Program Office assumed responsibility for administering and funding the SPARX program.

Staff and students collaboratively develop topics and projects. Student participants are continually engaged and asked to suggest new topics and direction for SPARX to ensure that program offerings resonate with student interests, which shift over time in response to social and political events like health reform efforts, emerging research, and pop culture. SPARX reaches out to students through a variety of means, including flyers, advertisements, and social media such as Facebook. Experience has demonstrated, however, that nothing substitutes for the effective outreach realized through student meetings and class orientations.

The SPARX program consists of three elements: forums and seminars on topics of interest or value for rural and urban underserved providers to stimulate student interest, training to develop skills and foster interprofessional relationships among students, and service projects to provide experiential learning and foster collaborative teamwork across involved health professions students. Early SPARX projects focused on health and wellness in rural children, kids' health screening, clothing drives, and outreach to migrant farm workers in the fields. In the late 1990s SPARX supported a mobile outreach and primary care project for urban homeless and street-involved youth. More recently, SPARX has partnered with Seattle Head Start to provide sensory assessments for children in its programs and larger urban health fairs targeting medically underserved Latinos.

In 1997 SPARX created the SPARX Participation Award to allow students to earn a certificate through attendance at seminars and support for projects. Students who gain the certificate are named in a letter to their respective deans and faculty advisors. In 2007 SPARX and a sister program in the Department of Family Medicine, the Community Health Advancement Program (CHAP), linked through a shared role in delivering program seminars, combined the award. This link allowed students participating in either program to earn points towards the shared SPARX/CHAP Award, recognizing that students had increasingly limited time for

service activities and shouldn't have to choose between program offerings on account of the certificate.

Demand for and participation in the SPARX program has increased over time. In 1995–1996 fewer than 100 students participated, and of those more than 70 per cent were medical students. In 2009–2010 more than 500 students from all the health sciences participated in at least one SPARX activity and 87 students will receive the SPARX/CHAP Award. The Latina Health Fair activity drew over 140 student volunteers, a record for any University of Washington-sponsored service project except the institutional support for the Martin Luther King Jr Day of Service. In 2009–2010 SPARX offered 13 seminars, panels, and forums and seven service projects, including sensory screening at Head Start, breakfast programs at a youth homeless shelter nine days a month, Martin Luther King Jr Day of Service projects, the One Night Count of Homeless, the Latina Health Fair, and mentoring at a school for homeless children. The Latina Health Fair alone reached over 500 families with health screenings, education, counseling, and referral to the community health clinic for follow-up, demonstrating the ability of these programs to reach far into communities.

### Common elements among interprofessional curriculum models

There are many elements of collaborative practice that find their way into successful IPE experiences like those described in this paper. These elements include responsibility, accountability, coordination, communication, cooperation, assertiveness, autonomy, and mutual trust and respect (6). A successful interprofessional curriculum will ensure that students can experience, share, and practice these traits with each other.

Understanding others' professions and your own role in the healthcare team is critical in IPE (28). This represents a longitudinal developmental goal; as students become more immersed in their own education they are likely to gain a better and more comprehensive understanding of their role in the healthcare team. Though at first students may not understand the complexities of the relationships between their profession and others, it is important to develop a common framework early in their education that describes a best practice model of interprofessional interaction. This will provide a goal that they can work towards as they move from student to professional healthcare team member. As a part of this enhanced understanding, exploring boundaries of each profession will help students understand better the duties for his/her profession.

Another key element is for students to 'see' the impact of interprofessional efforts and reflect on the experience to help reinforce interprofessional learning outcomes.

For students, their attitudes and perceptions regarding successful models of collaboration, whether clinical or

educational, can be essential to the value of the instruction. Grading student participation will also add value for them.

Lastly, the training of mentors/faculty is an important element in the successful interprofessional curriculum. Mentors and faculty need to feel confident in their interactions with students. The significance of any interprofessional course needs to be shared with faculty so they can see its importance.

### Resources

An interprofessional curriculum requires a significant commitment from university administration, as well as deans and faculty from multiple professions who must be willing to champion the effort. Each curriculum effort should be critically evaluated, both quantitatively and qualitatively. In addition, we have found the following resources to be crucial to the success of the interprofessional learning experience.

For didactic learning experiences, consider the following.

1. Commitment from departments and colleges to set aside time for students to participate in the course.
2. Curricular mapping between schools can facilitate activities.
3. Adequate rooms and facilities able to accommodate large numbers of students, faculty, staff, and community members.
4. Creation of a space for a sense of community and shared purpose through ice-breaking activities and introductions.
5. Technology for web-based conferences to reach all participants, as well as a learning system to administer course content materials and grade students.

For community-based learning experiences for students, consider the following.

1. Do you have an enthusiastic commitment from community partners?
2. Create projects which utilize a diversity of professions.
3. If you are using families or individuals, do you have clear expectations as to whether this is simply an educational experience for your students or delivery of healthcare?
4. Are there contingencies for community participants who become lost to follow-up?
5. Confidentiality of personal health information must be a high priority.
6. The university must develop a community presence so that year after year these relationships can be strengthened and new partnerships formed.

7. Remember that reflection is an important part of service learning programs.

If you are planning an interprofessional simulation experience for students, consider the following.

1. Calendar and schedule agreement among the participating colleges and programs.
2. Evening and weekend activity opportunities.
3. Expertise to develop simulation experiences with interprofessional objectives in mind.
4. Personnel to debrief experiences.

### Summary recommendations

There are several factors that are essential to the success of interprofessional programs and activities.

1. Administrative support. Coordination of interprofessional experiences may require significant changes in the curriculum structure of one or more colleges. Deans, curriculum committees, and educational administrators must be supportive of these activities.
2. Interprofessional programmatic infrastructure. Faculty resources are essential. Faculty members from each college are needed to provide leadership and recruit teaching faculty from their college, as well as coordinating activities between colleges. Additionally, administrative support is needed to schedule rooms, confirm mentor availability, submit attendances and grades, and find substitutes when necessary.
3. Committed, experienced faculty. It takes dedicated and educated faculty and staff to provide leadership to student groups, whether in a didactic or a clinical setting.
4. Acknowledge student efforts through awards, certificates, or grades.

While there are many barriers to developing successful interprofessional learning experiences, they can be overcome with persistence and commitment, as demonstrated in these examples of successful programs. Given the importance of quality care outcomes and the recognition that collaborative practice improves these outcomes, interprofessional education should be a high priority for every training institution. We hope our experiences will guide you to develop rewarding IPE curricula for your students.

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## Appendix. University of Florida 2010–2011 Interdisciplinary Family Health required competencies

*(A list of assignments that evaluate each competency follows the competency. The assignments are given below.)*

### Patient care competencies

Health professionals must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Our students are expected to:

1. communicate effectively and demonstrate caring and respectful behaviors when interacting with volunteers and their families
2. gather essential and accurate information about their assigned families
3. evaluate health behavior and develop a family health project for one of the members in the volunteer family
4. counsel and educate volunteers and their families
5. provide healthcare information aimed at preventing health problems or maintaining health
6. develop a basic understanding of the features of the community in which the volunteer family resides as they relate to support structures, resources, and access to healthcare
7. learn and understand key patient safety concepts, core theories, and terminology, such as adverse events, close calls, and a culture of safety
8. understand the impact of patient errors on the family and the provider
9. recognize and respond appropriately to potential and actual unsafe clinical situations.

### Interprofessional and communication skills competencies

IFH students must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with volunteers, their families, and professional associates. Students are expected to:

1. communicate and collaborate professionally and therapeutically with assigned families and students from different healthcare professions
2. develop skills in eliciting perceptions of health from family members
3. demonstrate ability to collect a culturally sensitive and comprehensive health history, including mood, medication, and nutritional assessment
4. use effective listening skills and elicit and provide information using effective non-verbal, explanatory, questioning, and writing skills

5. work effectively with others as a member or leader of a healthcare team or other professional group
6. demonstrate knowledge of and respect for overlapping roles and distinct competencies of different health professionals
7. present synthesized information related to the health of the volunteer in a small group setting.

### Professionalism competencies

Students must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. IFH students are expected to:

1. demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and ongoing professional development
2. meet the responsibilities of the IFH course, including attending all small group sessions and completing each assigned home visit by the required date
3. demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
4. demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities
5. demonstrate willingness for self- and external evaluation and feedback
6. demonstrate a commitment to patient safety as a key professional value and an essential component of daily practice.

### Assignments

1. Family home visit
2. Home visit reports
3. Genogram
4. Windshield survey
5. Family health survey
6. Small group discussion
7. Family health outline and project
8. Reflection report and presentation
9. Social service consult
10. Peer evaluation
11. Pre-course web-based learning in patient safety