# Center for Interprofessional Health Education 2014-2015





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## Message from the Provost Timothy S. Tracy, PhD, RPh



The Center plays an important role in the educational mission of our colleges that interact with patients in the healthcare setting. Providing students the opportunity to learn about team-based care in interprofessional collaborative settings and practice and employ

those skills in real patient settings prepares them for the world of healthcare, now and in the future. I commend the Center for the great work it does on behalf of our students and their patients.

## Message from the Executive Vice President for Health Affairs Michael Karpf, MD



Much has been written about the importance of team work in assuring patient safety, and there is no question that patient safety is enhanced when providers work as a team. At UK HealthCare, however, we believe team work is essential to all aspects of patient care. For that reason, we promote it among our providers and we expect our new hires to come to us with the skills necessary for effective interprofessional practice. That is why we support this Center and the work it is doing. We want to help assure that the next generation of providers possesses these critically important competencies from the start and believe the educational innovations being developed and implemented through the Center contribute to that outcome.

### Message from the Board of Directors Chair Janie Heath PhD, APRN-BC, FAAN



What an exciting time to be engaged with bridging the gap with health professional education and team-based care. The work that the UK Center for Interprofessional Health Education is doing is vital to the mission for students, faculty and clinicians to deliver safe and high

quality team-based care. I could not be more pleased to see the level of engagement of our faculty to develop shared core competencies and learning objectives to help transform our siloed healthcare delivery models to integrated care delivery environments.

## Center Update and Overview of the Report from the Director

#### Overview:

With the departure of Dr. Andrea Pfeifle, the founding Director of the Center for Interprofessional Health Education, it was my privilege to play the role of Interim Director for a time and then to be given the opportunity to direct the Center on a permanent basis. I believe we have made good progress, building on the work of Dr. Pfeifle, in making the Center a vital part of health education at UK and I am pleased to present this Annual Report that lays out the metrics and outcomes of our activities in some detail. These data show that the Center has touched a great many students each year and that, in general, these efforts are paying off with changes in student attitudes moving in the direction of more positive attitudes toward interprofessional practice and a greater understanding of its nature and of the roles of other professions in patient care. Further, students generally evaluate



these experiences positively. Also briefly discussed in this report are the scholarly activities to which the Center has contributed and the status of our external grants. We conclude with a description of our faculty development activities. I hope you find the report informative and I would welcome your feedback and ideas on how we can make our Center and the work it does maximally effective.

#### **Center Update:**

Quite a few important things happened with the Center during the 2014/2015 academic year. Perhaps most significant in terms of the long term, however, was the work of the Ad Hoc Committee appointed by then Provost Christine Riordan and chaired by Dr. Jim Holsinger. Its charge was to look at the Center and at IPE in the health professions and related colleges more generally and to recommend a way forward. The committee made a number of recommendations, but the most fundamental was that the Center should narrow its focus exclusively on the issue of education for team-based care, assisting the various colleges and programs in meeting accreditation requirements in this area and developing and evaluating innovative ways of teaching this content. Ultimately, this and the other recommendations of Dr. Holsinger's committee were accepted by the Center's Board of Directors and by the Provost, Dr. Tim Tracy. Accordingly, a proposal to change the name of the Center from, the Center for Interprofessional Healthcare Education, Research, and Practice, to, the Center for Interprofessional Health Education, was developed and approved by the University Senate in May of 2015. This name change better conveys to the University community what our Center actually does.

Other important developments have followed the adoption of the committee recommendations, including the addition of an Educational Specialist to the Center staff, who will assist the colleges and programs in identifying and evaluating existing clinical IPE opportunities. Further, he will be helping to identify potential new opportunities for such training and has developed a database to track student participation, providing colleges and programs annual data on how their students are accessing IPE.

Finally, we have developed a Fellows program for the Center to honor faculty members who have contributed to IPE efforts and to build a community at UK of IPE advocates on whom the Center can rely for advice and for service. The first class of Fellows will be inducted by the Center Board of Directors in October.

James C. Norton, PhD

Director, Center for Interprofessional Health Education

## **IPE Activity Descriptions**

#### **CENTER SPONSORED ACTIVITIES**

These activities are the core interprofessional activities at the University of Kentucky. They include both required and elective curricula in addition to elective co-curricular programing. All are managed and evaluated by the Center.

**Deans' Interprofessional Honors Colloquium:** The Deans' Interprofessional Honors Colloquium continued its highly successful run this year and it will expand next year to accommodate an additional 20 students per semester. In this project-based, limited didactics course that includes interprofessional shadowing, students and faculty from the health professions colleges and the College of Social Work participated. This year, the course addressed transitions of care. Next year's topic is childhood obesity.

**Leadership Legacy:** A very significant event this year was the rebirth of Leadership Legacy, which had lapsed after a promising start. This semester long experience complements the formal curriculum by providing participants with a series of cohort-based activities in retreat, workshop, service, and mentoring relationships to enhance interprofessional leadership skills and professionalism. Under the leadership of Erika Erlandson, MD, this year, 24 students representing all six health professions colleges participated and the Center will expand this program in 2015-2016 to two semesters, allowing 48 students to participate.

**Interprofessional Collaboration and Teamwork Skills (iCATS):** The iCATS core interprofessional curriculum affords students the baseline knowledge, skills, and attitudes required to participate in intermediate and advanced interprofessional curricula. This year, the course included six monthly meetings, of which one involved a simulation experience. The curriculum culminated in a convocation during which a panel of health care experts responded to questions students had generated over the course of the year. A new revision will be offered next year and will include two simulations. Students representing all participating programs played a major role in the design of the new iCATS.

**Interprofessional Lunch & Learn Series:** This student lead extracurricular colloquium provides students with an understanding of how professionals can work collaboratively in interprofessional teams to improve health outcomes for patients and communities. Students arranged presentations from individuals and clinical teams at UK to help their colleagues develop an enhanced understanding of how collaboration occurs at UK.

**CONMIGO Student Group:** This student led extracurricular colloquium provides students the opportunity to understand the barriers facing multi-cultural communities in accessing health care. In addition to monthly informational meetings, many of these students made presentations to clients at the refugee center to assist them in accessing the local health care system.

#### **COLLABORATIVE ACTIVITIES**

From its inception, the Center has been guided by the philosophy of engagement. Our goal is to be a catalyst for students, faculty, and staff to develop expertise in IPE and to apply that knowledge to the development of interprofessional education (IPE) activities. The following programs are supported by the Center. Each grew out of faculty interest in moving existing activities in an interprofessional direction or in bringing a new activity to UK. The Center's involvement varies across each and ranges from curriculum design assistance, evaluation services or consultation, and logistical support.

**Interprofessional Teamwork in Global Health:** This course helps prepare students and residents for the Shoulder-to-Shoulder health brigade in Ecuador. It prepares them to work effectively as an interprofessional team to promote positive, holistic health outcomes for individuals and communities.

**Emory Global Health Interprofessional Case Competition:** The Center was invited by the Assistant Provost for Global Health to develop and implement UK's first participation in the Emory Interprofessional Case Competition. Mimicking the structure of the national competition, a local competition was held in which teams addressed a health problem and offered a solution. The winning team represented UK in the Emory National Global Health Case Competition in Atlanta, GA and placed second. Our team was awarded the "Participant's Choice" Award by their peers as the best executed presentation and solution.

**AcademyHealth Student Chapter:** AcademyHealth is a membership organization representing health services researchers, policy analysts, and practitioners. It is a leading, non-partisan resource for the best in health research and policy. The Center was invited to help garner interest among students at UK for an official student chapter of AcademyHealth.

**Interprofessional Error Disclosure Simulations:** In this academic year, teams of students participated in simulations that allowed them collaboratively to disclose an error to a simulated patient. This was conducted twice, once with teams from Pharmacy and Medicine and again with teams from Pharmacy and Physician Assistant Studies.

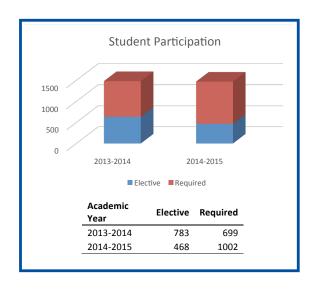
NOTE: The detailed tables at the end of this report include student and faculty participation statistics for each of the activities described above.

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#### **Metrics and Outcomes**

#### I. PARTICIPATION

In this academic year, 1470 students and 157 faculty members participated in one or more IPE activities. Twelve programs participated in IPE activities, some directly managed (and evaluated) by the Center and some supported by the Center, but managed and evaluated separately. A snapshot of participation over the past two years indicates that IPE participation has remained stable, but we anticipate increased numbers next year with the expansion of the Deans' Interprofessional Honors Colloquium and Leadership Legacy and with College of Medicine students participating in iCATS. Tables showing these data broken out by program appear at the end of this report.



#### II. OUTCOMES

**Overview** Program evaluation continues to demonstrate that longitudinal experiences that allow students to participate together over a prolonged period are effective in positively changing attitudes about the benefits of interprofessional health care. They lead to increased understanding of other professions educational requirements and scopes of practice, and, most importantly, they lead to measurable improvements in eight critical components of effective teams. The data described below are from the 2014/2015 cohort.

**Instrumentation** Programs that met over an extended period were evaluated pre and post using three instruments including:

- 1. The Attitudes toward Health Care Teams scale (Heinemann, et al., 1999). This instrument has two subscales. The Quality of Care Scale measures attitudes regarding the quality of care than can be enhanced by interprofessional collaborative care. The Physician Centrality Scale measures learners' attitudes toward physicians' authority in team and their control over patients' information. Anticipated change after a successful experience is for upward movement on the Quality of Care Scale and downward movement on the Physician Centrality Scale.
- 2. <u>Knowledge of Education and Scope</u> measure. This instrument measures student knowledge about the education and scope of practice of other professions.
- 3. The <u>Critical Components of Team Behavior</u> assesses eight constructs associated with effective team membership including: 1) ability to see health care as a team activity, 2) ability to see the big picture of health care, 3) a recognition of ones' own biases toward other professions, 4) ability to understand ones' own strengths and weaknesses, 5) ability to communicate effectively with other professions, 6) confidence in working in teams, 7) ability to motivate others, and 8) ability to bring a team to consensus.

#### **Results**

#### Attitudes toward Health Care Teams:

Results of pre and post assessment reveal statistically significant changes in attitudes regarding the benefits of interprofessional collaborative care among students who completed:

- Deans' Interprofessional Honors Colloquium
- IP Teamwork in Global Health
- Leadership Legacy

#### Knowledge of Education and Scope:

Results demonstrate statistically significant pre to post increases in students' knowledge of other disciplines' educational requirements, and/or scope of other professions among students who participated in:

- Deans' Interprofessional Honors Colloquium:
  - o Educational Requirements for: Dentistry, Medicine, Nursing ,Pharmacy, Physical Therapy and Public Health
  - o Scope for: Dentistry, Medicine, Nursing, Pharmacy, Physical Therapy and Public Health
- Interprofessional Teamwork in Global Health:
  - o Educational requirements for: Public Health
  - o Scope for: Public Health

- Leadership Legacy:
  - o Educational Requirements for: Dentistry, Nursing ,Pharmacy, Physical Therapy and Public Health
  - o Scope for: Dentistry, Pharmacy, Physical Therapy and Public Health

#### Critical Components of Team Behavior

Results demonstrate statistically significant gains in various critical components of effective team membership including: 1) ability to see health care as a team activity, 2) ability to see the big picture of health care, 3) a recognition of ones' own biases toward other professions, 4) ability to understand ones' own strengths and weaknesses, 5) ability to communicate effectively with other professions, 6) confidence in working in teams, 7) ability to motivate others, and 8) ability to bring a team to consensus. This was observed among participants who completed the following activities:

- Deans' Interprofessional Honors Colloquium (significant components include: 2, 4, 5, & 6)
- Interprofessional Teamwork in Global Health (significant components include: 2, 3, 4, 5, 7, & 8)
- Leadership Legacy (significant components include: 1, 2, 3, 4, 5, 6, & 7)

#### III. COURSE AND FACULTY EVALUATIONS

In general, student evaluations of IPE courses are positive. The data below are from the 2014/2015 academic year and employ a five point Likert scale for which 1 equals strongly disagree and 5 equals strongly agree.



#### **Deans' Interprofessional Honors Colloquium**

Course evaluations reveal that students are very satisfied with this course and find value in the experiences in which they participate. The students particularly value interprofessional shadowing (M=4.79) and think very highly of their small group facilitators for encouraging teamwork (M=4.89) and participation (M=4.87). Students indicate that there is value working with other professions (M=4.88) and that the course enhanced their appreciation of teamwork (M=4.82), increased knowledge of other professions (M=4.82) and improved their team skills (M=4.68).

#### **Interprofessional Teamwork in Global Health**

Evaluation of this course also is positive, with students agreeing that, overall, the course was good (M = 4.10). The large group didactics were effective (M = 4.06) and the quality of the presenters was highly rated (M=4.16). They indicate that the small group facilitators encouraged participation (M = 4.10), promoted collaboration (M = 4.26) and were effective overall (M = 4.19). Students agreed that the thirteen IPEC core IP competencies were met as a result of participating in the course (4.49).



#### Leadership Legacy



As with DIHC, evaluation of this experience is exceedingly positive. The agreement that, overall, the course is good reaches an astounding 4.91. They valued learning with other professionals (M = 4.95) and agreed that the experience increased their knowledge of other professions (M = 4.82). Very importantly, students felt that they had improved their team skills (M = 4.73) and that the course will help them achieve their leadership goals (M = 4.77). Students assessed the extent to which they believed that four IPEC core IP competencies were met as a result of the course and the grand mean was 4.57.

#### Interprofessional Collaboration and Team Skills (iCATS)

Course evaluation results were improved over last year but remain disappointing with students rating the overall value of the experience at 3.64. However, they were satisfied with their ability to interact with students outside their own disciplines (M=4.35) and students rated their facilitators highly, in terms of facilitators' effectiveness for engaging interaction (M=4.68), creating an environment amenable to team (M=4.66), and probing for learners' professional perspectives (M=4.70). Qualitative analysis indicates that students value simulations over all other activities.



#### IV. SCHOLARSHIP

In this academic year, eight peer-reviewed presentations at national conferences have been made with six submissions accepted for next year. Additionally, a case study of the course and student outcomes of Interprofessional Teamwork in Global Health was an invited case study featured on the World Health Organization's "Transformative Education for Health Professionals" website. Two manuscripts are in progress (Mandy Jones, PharmD, PA-C is the primary author) and the Center Director and Associate Director have been asked to write book chapters.

#### V. EXTERNAL FUNDING

The \$250,000 award granted in March 2014 from the National Center for Interprofessional Practice and Education as a participant in the Nexus Innovations Incubator continues. The focus is on developing and testing an interprofessional transition of care intervention. This funding continues until 2017. Erika Erlandson, MD and Lynne Jensen, PhD are Co-Is on the project.

This was the final year of the \$200,000 award from the Josiah Macy Jr. Foundation. UK was the lead institution to develop the "Southeast Consortium for Interprofessional Education" (SEC-IPE). The educational modules created through this funding are now available on the Center website for download and use by any interested faculty member, worldwide.

#### VI. FACULTY DEVELOPMENT

A landing page at UKHC CECentral dedicated to IPE faculty development was created in this academic year. It contains two completed modules: 1) Exploring Interprofessional Collaborative Practice (Boulanger, Mabins, Norton, Swartz, Taylor, & Ballard), and 2) Facilitating Small Interprofessional Learning Groups (Burkhart, Cheever, Jones, Olson, Sprang, & Ballard). Planning has begun for three additional modules to be released in the next academic year addressing error disclosure, transitions of care and evaluating team communication. Another important faculty development activity last year was an intensive session preparing facilitators for iCATS. This was held at the Boone Center and will be repeated in the fall in preparation for the roll out of the revised iCATS in 2015/2016. All these activities are overseen by the Faculty Development Committee, chaired by Dr. Stacy Taylor, College of Pharmacy.

#### **Conclusion:**

Thank you for reviewing this Annual Report from the Center for Interprofessional Health Education. We at the Center believe it documents solid achievements in IPE made by dedicated UK faculty and staff and by our students. We welcome your feedback.

## **Detailed Tables**

These tables indicate the number of students and faculty members who participated in IPE activities for academic year 2014-2015. The tables are organized by program. The legend designates the symbols for each college or program.

Table 1: Student Participation by Program 2014-2015

				CHS											
	cis	COD	СРЕ	АТ	CLS	CSD	PT	PAS	CON	сом	СОР	СРН	csw	UG	Total
iCATS		67	1			34	68	51	179	10	138				548
Deans' Interprofessional Honors Colloquium		13	8				12		13	12	12	8	1		79
IP Collaboration in Global Health (STS)						2	13		11	12	5	8		11	62
PA/Pham Error Disclosure Simulation								51			138				189
Med/Pharm Error Disclosure Sim										127	138				265
Leadership Legacy		2				2	5		3	4	6	2			24
Emery Case Competition	1						2		3	15	8	6	1	5	41
AcademyHealth Student Meeting						1			3	1	1	31		4	41
Interprofessional Lunch & Learn Student Group		30			2	1	7	3	23	63	29	2	1	4	165
CONMIGO Student Group		12					4	1	1	27	7	4			56
Total	1	124	9	0	2	40	111	106	236	271	482	61	3	24	1470

Symbol	College/Program
CCI	College of Communication and Information
COD	College of Dentistry
CPE	Clinical and Pastoral Education
CHS	College of Health Sciences
AT	Athletic Training
CLS	Clinical Lab Sciences
CSD	Communication Sciences and Disorders
PT	Physical Therapy
PAS	Physician Assistant Studies
CON	College of Nursing
СОМ	College of Medicine
СОР	College of Pharmacy
СРН	College of Public Health
CSW	College of Social Work
UG	Undergraduates

**Table 2: Faculty Participation by Program 2014-2015** 

				CHS											
	CIS	COD	СРЕ	AT	CLS	CSD	PT	PAS	CON	сом	СОР	СРН	csw	G	Total
iCATS		8	1			3	8	6	16	4	14				60
Deans' Interprofessional Honors Colloquium		2	2				1		4	13	3	2	2		29
IP Collaboration in Global Health (STS)						1	2	2	1	3	1	2			12
PA/Pham Error Disclosure Simulation								4			10				14
Med/Pharma Error Disclosure Sim										5	8				13
Leadership Legacy		1				1	1		1	2	1	1		1	9
Emory Case Competition									3	4		2		3	12
AcademyHealth Student Meeting										2		1			3
Interprofessional Lunch & Learn Student Group										2	1			1	4
CONMIGO Student Group										1					1
Total	0	11	3	0	0	5	12	12	25	36	38	8	2	5	157

# **In Appreciation**

The Center appreciates the support and leadership provided by the Board of Directors, Academic Leadership Committee, and the hundreds of faculty, staff, and students who have contributed to the IPE community at UK.

#### **Board of Directors**

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James Adams, PhD	College of Social Work
Charles Griffith, MD, MSPH, FACP	College of Medicine
Janie Heath, PhD, APRN-BC, FAAN	College of Nursing
Scott Lephart, PhD	College of Health Sciences
Dan O'Hair, PhD	College of Communication and Information
Wayne Sanderson, PhD, CIH	College of Public Health
Kelly Smith, PharmD, BCPS, FASHP, FCCP (Interim)	. College of Pharmacy
Sharon Turner, DDS, JD	College of Dentistry

#### **Academic Leadership Committee**

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