Interprofessional Education (IPE): Lessons Learned from Implementing Didactic, Simulation and Experiential Education Activities

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Dean and Professor
College of Pharmacy
Northeast Ohio Medical University (NEOMED)
Thank you for attending the 2011 AACP Annual Meeting. This is a reminder that this session, Special Session: Interprofessional Education (IPE): Lessons Learned from Implementing Didactic, Simulation and Experiential Education Activities, is being recorded with audio and speaker materials synchronized and available for purchase and future viewing as part of the meeting value package. Visit the sales booth located near the AACP Registration and Information Desk on Floor 2 for more information. Enjoy the session!
Health Care Teams Today

“Silo” Approach

- Training of health professionals is typically isolated by discipline

- Professionals are unprepared to enter practice in complex collaborative settings

- Inability to enhance teams with other types of providers
Transformation of Health Professions Education

- Enables students to engage in interactive learning with those outside their profession
- Prepares students for “deliberatively working together”

*Common goal: building a safer and better patient-centered and community/population-oriented health care system.*

Why Interprofessional Education (IPE)

- Institute of Medicine: Crossing the Quality Chasm
  - Evidence-Based Practice Teaching
  - Interdisciplinary Training

“Clinicians and institutions should actively collaborate and communicate to ensure an appropriate exchange of information and coordination of care.”

Why Interprofessional Education—Cont’d

• **Impact on the patient**
  – Improved patient outcomes and reduced medical errors
  – Medication therapy management
  – Communication among professions
  – Focus of care on short-term compared to long-term outcomes

Not a New Notion

• Barbara Given and Sandra Simmons (1977)
• The Interdisciplinary Health-care Team: Fact or fiction?

— “...involves collaboration between health care professionals as a means of eliminating gaps and overlaps in services.”

Given B, Simmons S. The Interdisciplinary Health-care Team: Fact or fiction? Nursing Forum. 1977;16:165-84
Future Vision of Pharmacy Practice 2015

“[Pharmacists]...will communicate and collaborate with patients, care givers, health care professionals, and qualified support personnel.”

Interprofessional Education Defined

• “When students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010)

ACPE Standards & Guidelines

• Accreditation Council for Pharmacy Education (ACPE) release of Guidelines 2.0 for ACPE Standards 2007 (S2007).

• Areas of focus:
  – Interprofessional teamwork
  – Interprofessional education

“...to better prepare pharmacy graduates to practice or deliver care in collaborative health care teams.”
| 1.6: | ...**promotes** development of **interprofessional learning and collaborative practice** in didactic and experiential education |
| 3.2: | **evaluation** plan should include ...**interprofessional education** |
| 6.1: | The relationships, collaborations and partnerships should **advance**...**interprofessional education** |
| 6.2: | ...**promote integrated and synergistic interprofessional** and interdisciplinary **activities** |
| 8.2: | The **dean** must have authority and be **responsible for** ensuring collaborative efforts to develop, implement, evaluate, and enhance **interprofessional education**... |
| 9.1: | The college/school must **ensure** that the curriculum addresses...**competencies needed** to work as a member of or on an **interprofessional team** |
Standard 12: [graduates must achieve the ability to] provide patient care in cooperation with patients, prescribers and other members of an interprofessional health care team...[and] promote health improvement, wellness and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers

12.1: Graduates must...provide patient-centered care, through the ability to function effectively as a member of an interprofessional care team

14.5: Colleges/schools are encouraged to develop interprofessional simulations...

27.1: ...facilities that encourage interprofessional interactions

30.2: ...enable innovation in education, interprofessional activities...
# ACPE Appendices

<table>
<thead>
<tr>
<th>Appendix B:</th>
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</thead>
<tbody>
<tr>
<td>- Professional Communication... <strong>communicating</strong> research and clinical findings <strong>to</strong></td>
</tr>
<tr>
<td><strong>interprofessional and interdisciplinary audiences</strong></td>
</tr>
<tr>
<td>- Pharmacy Practice/Pharmacist-Provided Care... <strong>interprofessional team decision making and care</strong></td>
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<tr>
<td><strong>provision</strong></td>
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<table>
<thead>
<tr>
<th>Appendix C:</th>
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<tbody>
<tr>
<td>- Oversight of Pharmacy Practice Experiences... assessment and reporting... should promote...</td>
</tr>
<tr>
<td><strong>student ability to offer constructive criticism in a manner appropriate to</strong></td>
</tr>
<tr>
<td><strong>interprofessional relationships</strong></td>
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<tr>
<td>- APPE... practicing as a <strong>member of an interprofessional team</strong></td>
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<thead>
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<th>Appendix D:</th>
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<tbody>
<tr>
<td>- Maps to 2004 CAPE Outcomes... <strong>promote health improvement, wellness, and disease prevention</strong></td>
</tr>
<tr>
<td><strong>in cooperation</strong> with patients, communities, at-risk populations, and other members of an</td>
</tr>
<tr>
<td><strong>interprofessional team of health care providers</strong></td>
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Interprofessional Education Collaborative

- Core competencies for Interprofessional Education released May 2011
- Collaborative includes:
  - American Association of Colleges of Pharmacy (AACP)
  - Association of American Medical Colleges (AAMC)
  - American Association of Colleges of Nursing (AACN)
  - American Dental Education Association (ADEA)
  - American Association of Colleges of Osteopathic Medicine (AACOM)
  - Association of Schools of Public Health (ASPH)
Objectives for Session

• This program will present the perspective of three schools of pharmacy that have experience implementing IPE activities in a variety of learning environments, including:
  – didactic courses
  – simulated patient care laboratory; and
  – experiential settings

• Lessons learned during implementation and strategies for ensuring successful implementation of IPE activities will be discussed
Interprofessional Education (IPE): Didactic Activities

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Director, Pharmacotherapy
Assistant Professor Pharmacy Practice
Northeast Ohio Medical University (NEOMED)

*formerly Northeastern Ohio Universities Colleges of Medicine and Pharmacy (NEOUCOM)*
History of NEOMED

- College of Medicine founded 1974
  - BS / MD program (6 year accelerated curriculum)
  - consortium of U of Akron, CSU, KSU, and YSU

- College of Pharmacy founded 2005
  - Doctor of Pharmacy program (2 + 4 year curriculum)
  - inaugural class enrolled 2007

- College of Graduate Studies founded 2010
  - M.S. and Ph.D. - Integrated Pharmaceutical Medicine
  - M.P.H. program
  - planned enrollment fall 2011
## Pharmacy Curriculum Blueprint

<table>
<thead>
<tr>
<th>Year 1: Dosage Forms</th>
<th>Year 2: Medication Use Systems</th>
<th>Year 3: Patient Safety</th>
<th>Year 4: Patient Centered Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prologue</td>
<td></td>
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<tr>
<td>Human Development and Structure</td>
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<tr>
<td>Molecules to Cells</td>
<td>Physiologic Basis of Medicine</td>
<td></td>
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<tr>
<td>Brain, Mind &amp; Behavior</td>
<td>Evidence Based Medicine 1 &amp; 2</td>
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</tr>
<tr>
<td>Healthcare Delivery Systems</td>
<td>Pharmaceutics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parenterals</td>
<td>Infection and Immunity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medication Use Systems</td>
<td>Management 1 &amp; 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutraceuticals</td>
<td>Principles of Drug-Body Interactions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacotherapeutics 1</td>
<td>Pharmacotherapeutics 2 &amp; 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Electives</td>
<td>Pharmacy Law 1 &amp; 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Electives</td>
<td>APPEs</td>
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<tr>
<td>Capstone</td>
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Longitudinal Curriculum: Pharmacist Patient Care Experiences (On-campus + IPPEs)
Longitudinal Curriculum

- Curricular oversight – both medicine and pharmacy
  - Interprofessional longitudinal management team (LMT)

- Focus on skills development/application
  - Integration with other courses
    - On-campus activities
    - Experiential (IPPEs)
Current State of IPE at NEOMED

Longitudinal Curriculum: Pharmacist Patient Care Experiences
(On-campus + IPPEs)
## Current Level of IPE

<table>
<thead>
<tr>
<th>Significant / Complete</th>
<th>Developing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Longitudinal – PPCE / Doctoring</strong></td>
<td><strong>Longitudinal - PPCE / Doctoring</strong></td>
</tr>
<tr>
<td>▪ Prologue</td>
<td>▪ Population health</td>
</tr>
<tr>
<td></td>
<td>▪ Ethics</td>
</tr>
<tr>
<td></td>
<td>▪ Interprofessional Team Project (ITP)</td>
</tr>
<tr>
<td><strong>Foundational Sciences:</strong></td>
<td><strong>Experiential rotations:</strong></td>
</tr>
<tr>
<td>▪ Molecules to Cells (MTC)</td>
<td>▪ IPPEs</td>
</tr>
<tr>
<td>▪ Physiologic Basis of Medicine (PBM)</td>
<td>▪ APPEs</td>
</tr>
<tr>
<td>▪ Brain, Mind and Behavior (BMB)</td>
<td></td>
</tr>
<tr>
<td>▪ Infection &amp; Immunity (I &amp; I)</td>
<td></td>
</tr>
<tr>
<td><strong>Evidence Based Medicine (EBM)</strong></td>
<td><strong>Pharmacotherapeutics</strong></td>
</tr>
</tbody>
</table>
Examples of IPE at NEOUCOM

- P1 / M1: Foundational Sciences
  - Brain, Mind and Behavior (BMB)

- P2 / M2: Longitudinal Curriculum
  - Interprofessional Team Project (ITP)

- P3 / M2: Clinical - Patient Care
  - Pharmacotherapeutics / Principles of Medicine
Foundational Sciences: Brain, Mind and Behavior (BMB)

- Co-course directors from pharmacy and medicine
  - teaching faculty from multiple disciplines

- 16 hours /week x 8 weeks
  - mix of lecture and labs
  - individual and group work (informal)

- Clinical integration
  - cases per topic, “real” patients
Foundational Sciences: Brain, Mind and Behavior (BMB)

• Student Assessment
  – 3 exams – written + practical

• Integration with longitudinal curricula
  – Bioethics
  – Professional impairment
  – Behavioral sciences
  – Depression/Suicide Prevention and Management
# Foundational Sciences: BMB Assessment 2011

## Student Course Evaluations AY 2010-2011 (n=153)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The material in the course was presented at an appropriate level.</td>
<td>93.4%</td>
</tr>
<tr>
<td>There was continuity from one topic to the next.</td>
<td>97.4%</td>
</tr>
<tr>
<td>Integration between basic science and clinical concepts was evident in this course.</td>
<td>98.7%</td>
</tr>
<tr>
<td>Knowledge gained in the course was reinforced by projects or demonstrations that show practical applications.</td>
<td>99.3%</td>
</tr>
<tr>
<td>Laboratory/small group sessions were useful and helpful.</td>
<td>92.2%</td>
</tr>
<tr>
<td>Overall, this course was valuable.</td>
<td>90.2%</td>
</tr>
<tr>
<td>Taking this course with students from another discipline was helpful in establishing interprofessional relationships.</td>
<td>53.6%</td>
</tr>
</tbody>
</table>

Reported as percentage of students who “agreed” or “strongly agreed.”
Longitudinal Curriculum: Interprofessional Team Project (ITP)

- Co-course directors from Pharmacy and Medicine
  - PPCE and Doctoring courses

- Spring P2 / M2 – runs over 12 weeks

- Students organized into IP teams of 10 students
  - Problem-based learning
  - self-directed learning (asynchronous)
  - 3 mandatory and 3 voluntary meetings

- Student teams are confronted with caring for a complex “new” patient
Longitudinal Curriculum: Meet Mrs. Smith

<table>
<thead>
<tr>
<th>Medical Problems</th>
<th>Psychosocial Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comminuted intertrochanteric fracture</td>
<td>No prescription coverage</td>
</tr>
<tr>
<td>Elevated blood sugar</td>
<td>Limited income</td>
</tr>
<tr>
<td>Obesity</td>
<td>No advanced directives (e.g. living will)</td>
</tr>
<tr>
<td>Osteopenia / osteoporosis</td>
<td>Poor lifestyle choices</td>
</tr>
<tr>
<td>Smoker</td>
<td></td>
</tr>
</tbody>
</table>
Longitudinal Curriculum: ITP Assignments

- Professionalism
- Interpersonal/Communication Skills
- Systems Based Practice
- Practice Based Learning
- Medical Knowledge
- Patient Care

Project Assignments
Longitudinal Curriculum: ITP Student Reflections

• Teamwork- Interprofessional
  – “What needs does my patient have and how can I better serve them?” The answers lie within a multidisciplinary team approach to healthcare. I never realized how important it was until now.
  – One thing that amazes me is that we had 6 months to accomplish (this project). The healthcare team accomplishes the same amount in a few days or weeks.

• Respect- Interprofessional
  – It was not until I sat down with the pharmacy students and, between all of us, talked through her medical conditions and the options for Mrs. Smith’s conditions, that a lot of my questions were answered. Where I learned from the pharmacy students, they learned from me as well.
  – Not having had much therapeutics, I really did not know everything that was going on with this patient. However, I failed to realize I had resources at my fingertips and those were the medical students.
Clinical – Patient Care: Pharmacotherapeutics and Principles of Medicine

• “Stand-alone” case-based interactive review session
  – combines P3 and M2 students
  – interprofessional teams of 8-10 students

• Focused on area of content overlap
  – musculoskeletal module (rheumatology)
Clinical – Patient Care:
Pharmacotherapeutics and Principles of Medicine

• 4 hour joint session co-facilitated by clinical faculty from Pharmacy and Medicine
  – 3-4 clinical cases
  – targeted questions – oral and written responses

Session Evaluation: *The interprofessional case discussion was a valuable experience.*

<table>
<thead>
<tr>
<th></th>
<th>Pharmacy</th>
<th>Medicine</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>75%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Reported as percentage of students who “agreed” or “strongly agreed.”
Future IPE

- Evidence-Based Medicine 2
- Healthcare Delivery Systems
- IPPEs and APPEs
- Longitudinal Curriculum
  - Community educator program
  - Population health: IMPACTS project
  - Clinical skills assessments
  - Physical assessment
  - Capstone
A Simulated Interprofessional Patient Care Activity at the University of Kentucky

Mikael D. Jones, PharmD, BCPS
Assistant Professor
Pharmacy Practice and Science Department
Background

• Spring 2010 first activity was held between
  – MD 824 Pharmacology (2\textsuperscript{nd} Year Medical Students)
  – PPS 969 Patient Care Lab VI (3\textsuperscript{rd} Year Pharmacy Students)
• Spring 2011 activity added a pilot group of nursing students
  – NUR 886 - Synthesis of Clinical Knowledge for Nursing Practice (4\textsuperscript{th} year BSN)
Global Activity Goals

- Develop higher level thinking in a clinically appropriate setting, regarding the pharmacotherapy of both acute and chronic disease states.
- Apply pharmacokinetic and pharmacodynamic concepts to a patient suffering from several medical conditions.
- Develop skills and attitudes essential for establishing effective health care team dynamics, in addition to creating an awareness for each role within a team.
- Develop behaviors that promote patient safety through recognition of health care team roles.
- Improve health care team communications to improve patient care and reduce medical errors.
Overview of Activity

- Orientation to activity and assigned teams (Late Feb)
- Standardized Patient Case Part 1 (Mid-March)
- Standardized Patient Case Part 2 (Mid-March)
- Debriefing Discussion (Early April)
Case Development

• Starts in the summer
• Writing group consists of activity faculty
• Case is disseminated to other faculty for review
• Guiding principles
  – Case engages each involved profession
  – Case utilizes the most realistic patient presentation, laboratory data, clinical interventions and documentation as possible
  – Case requires a reasonable amount of teamwork to be efficiently resolved
IPE Activity Cases

• 2010
  – Part 1: Inpatient admission for Community Acquired Pneumonia
  – Part 2: Patient with A-fib with RVR secondary for inappropriate omission of beta-blocker therapy

• 2011
  – Part 1: Inpatient admission for Hypertensive Emergency
  – Part 2: Discharge planning and counseling
60 Teams
2 M2 + 2-3 PY3

120 M2
Teams remained the same for throughout activity

130 PY3
In 2011 17 teams had 1 BSN student

30 teams
Mon Track

30 teams
Wed Track
Orientation

- Students assemble into their assigned teams
- Guest physician speaker discusses need for interprofessional care
- Discussion on the team dynamics and role in interprofessional care
- Discussion of activity logistics
Standardized Patient Case
Logistics: Schedule, Manpower and Space

- **Time**
  - 4 days
    - Part 1 = 2 days
    - Part 2 = 2 days
  - 30 teams per day
    - 3 two-hour blocks
    - 10 teams per 2-hour block

- **Manpower**
  - 4 Lead Faculty
  - 1 Lab Tech
  - 10 Standardized Patients
  - 10 exam room facilitators (part 1 only)
  - 5 “documentation” room facilitators (part 1 only)

- **Space**
  - Preparation area
  - 10 exam rooms equipped with digital recording
  - Documentation area
## Part I Logistics: Work Flow

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preparation</strong></td>
<td>• Students receive instruction and initial case material to review</td>
</tr>
<tr>
<td>(15 min)</td>
<td></td>
</tr>
<tr>
<td><strong>Patient Encounter</strong></td>
<td>• Teams must interview the patient, complete a focused physical exam, a medication history/medication reconciliation</td>
</tr>
<tr>
<td>(40 min)</td>
<td>• Teams need to implement initial monitoring plan and medication therapy</td>
</tr>
<tr>
<td><strong>Planning</strong></td>
<td>• Teams develop therapeutic plan for your working diagnosis</td>
</tr>
<tr>
<td>(60 min)</td>
<td>• Each team writes/submits an admission note, admission orders, medication reconciliation form, and Nursing Assessment (if team has a nursing student)</td>
</tr>
</tbody>
</table>
### Part I Logistics: Work Flow

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instructions</strong> (10 min)</td>
<td>Students receive instruction and initial case material to review.</td>
</tr>
<tr>
<td><strong>Discharge Planning</strong> (40 min)</td>
<td>Each team is to plan for the patient’s discharge and then provide discharge instructions/education to the patient.</td>
</tr>
</tbody>
</table>
| **Discharge Counseling** (60 min)| - Teams will communicate discharge plans to patient  
                         - Physician follow-up/ referrals, Instructions on when to seek immediate care, Medication Discharge Reconciliation, Disease state education, Medication education |
Part I & Part 2: Post-Activity Self Assessments

• Each team receives a website that contains the digital recording of their interview
  – Team members watch their video then complete an online self-assessment survey
  – The video can only be viewed on campus

• Teams receive patient and facilitator evaluation of their encounter to review
Final Debriefing

• A final debriefing activity was scheduled to review
  – Case
  – Feedback on areas of excellence and areas that need improvement
  – Feedback to faculty on activity
Assessment Strategies

• Prior to Orientation
  – Interdisciplinary Education Perception Survey
  – Attitudes Toward Health Care Teams Scale

• During Activity
  – Each member reviews team/patient video and completes self-assessment

• After Activity
  – Interdisciplinary Education Perception Survey
  – Attitudes Toward Health Care Teams Scale
  – General Activity Evaluation

Heinemann, et al. Team performance in health care: Assessment and development 2002
### Activity Evaluation for Spring 2011

Reported as percentage of students who “agreed” or “strongly agreed.”

<table>
<thead>
<tr>
<th>Activity</th>
<th>M2 n=94</th>
<th>PY3 N=119</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt confident in my ability to complete this activity.</td>
<td>72%</td>
<td>77%</td>
</tr>
<tr>
<td>This activity developed my skills in identifying, solving and documenting drug therapy problems.</td>
<td>71%</td>
<td>91%</td>
</tr>
<tr>
<td>This activity assisted me in understanding the roles and expertise of other health care team members.</td>
<td>82%</td>
<td>95%</td>
</tr>
<tr>
<td>This activity developed my interprofessional communication skills.</td>
<td>71%</td>
<td>92%</td>
</tr>
<tr>
<td>This activity demonstrated the value of providing team-based care.</td>
<td>70%</td>
<td>92%</td>
</tr>
<tr>
<td>Overall, I believe this was a valuable education activity.</td>
<td>66%</td>
<td>91%</td>
</tr>
</tbody>
</table>
Experiential and Extracurricular IP Activities

Sarah Shrader, PharmD, BCPS, CDE
Assistant Professor
Dept. Clinical Pharmacy and Outcomes Sciences
South Carolina College of Pharmacy, MUSC Campus

Interprofessional Service Learning Project (ISLP)

• Required of all 4th year pharmacy students on community rotations at certain sites around state
  – Funded in part by APTR
  – Family Medicine clerkship, Pharmacy, PA and MHA students work together
  – Service learning work focused on prevention of childhood obesity
  – Pilot project at MUSC first year, now with students statewide through AHEC support

ISLP

• Interprofessional Service Learning Project
  – 3 online modules – team skills, community health, obesity
  – 3 didactic team learning sessions facilitated by AHEC educator
  – 2-5 visits to elementary school for service project
  – Requires time away from traditional community rotation activities
## ISLP Assessment

### Student Evaluation of the Interprofessional Service-Learning Project

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The teamwork module was valuable to my learning.</td>
<td>64%*</td>
</tr>
<tr>
<td>Working with other students on the project improved my teamwork skills.</td>
<td>93%*</td>
</tr>
<tr>
<td>The &quot;Assumptions&quot; activity helped me better understand professions different than my own.</td>
<td>100%*</td>
</tr>
<tr>
<td>Working with other students on the project helped me better understand professions different than my own.</td>
<td>100%*</td>
</tr>
<tr>
<td>The overall experience increased my appreciation for interprofessional collaboration.</td>
<td>100%*</td>
</tr>
<tr>
<td>The learning experience was well organized.</td>
<td>86%*</td>
</tr>
<tr>
<td>I would rate the effectiveness of our teamwork on the project as...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>71% “Excellent”</td>
</tr>
<tr>
<td></td>
<td>29% “Good”</td>
</tr>
</tbody>
</table>

*Reported as percentage of students who “agreed” or “strongly agreed.”*
Medical Home Visits

• Pilot project incorporating 3rd year medical students on rural/family medicine rotation and 4th year pharmacy students on ambulatory care rotation

• Home visit was already an existing requirement for medical students

• Goal is to expand it statewide in future at certain sites, possibly using AHEC support
Medical Home Visits

• In-home patient assessment/history
  – Past medical history
  – Social history
  – Home safety assessment
  – Medication assessment

• Team of students report back to attending physician and pharmacist with recommendations

• Significant findings documented in medical record

• Summary of visit using a template is completed by the student team and submitted to preceptors
APPE Rotations on a Daily Basis

• Clinical team interactions in academic health centers daily!

• Opportunities exist to build more structured IP activities into our clinical rotations

• Must build more evaluation of teamwork and interprofessional collaboration process into experiential evaluations
Presidential Scholars Program

Offers for selected students a meaningful interprofessional interaction around health care systems and social issues that transcend professional boundaries.
Presidential Scholars Program

• Activities:
  – Twice monthly evening sessions
  – Group project
  – Day long retreat
  – Visit to State Legislature
  – Dinner at the University President’s home
  – Scholars’ Day: share results of project work and recognition ceremony
Presidential Scholars Assessment

• Evaluation of individual sessions
• Evaluation of program at end of year
• Pre and Post Student Survey of Attitudes
  – PSP students have significantly greater understanding of each other and value of IP collaboration than control group

Student Organizations: Student Interprofessional Society (SIPS)

Dedicated to promoting interprofessional education across campus through social interaction during professional training.
SIPS

• Activities
  – Monthly meetings
  – Service activities
  – Link with South Carolina Hospital Association and the Institute for Health Improvement (IHI) Open School
CLARION Competition

Through an interprofessional case competition, provide a framework for students to learn about IP collaboration and addressing patient safety issues.
CLARION Competition

- Originally developed at the University of Minnesota
- National competition held annually in April in Minneapolis
- Originated locally with students from Phi Lambda Sigma Pharmacy Leadership Society
- Local competition determines team sent to national competition

Assessing the Impact of IPE Activities

Trish R. Freeman, RPh, PhD
Associate Professor
Director, Professional Practice Programs
University of Kentucky College of Pharmacy
Pharmacy Practice and Science Department
Importance of Assessment

• IPE activities are resource intensive
  – time and dollars
• Activities should be evaluated/assessed to determine which activities are having greatest impact on student learning and attitudes toward teamwork
• As attitudes often are determinants of behavior, developing positive attitudes toward working in teams may improve future team functioning
Potential Outcomes of the Team Approach to Care

- A well functioning team delivers:
  - More efficient care
    - Less duplication and fragmentation
  - higher quality of care
    - Increased patient safety
  - More cost effective care
Assessing Student Attitudes

• Two validated tools used at University of Kentucky for IPE activities
  – Interdisciplinary Education Perception Scale (IEPS) developed by Leucht
  – Attitudes Toward Healthcare Teams Scale (Attitudes Scale) developed by Heinemann

# IEPS

## Interdisciplinary Education Perception Scale Items Organized by Factor

<table>
<thead>
<tr>
<th>Attitude Domain</th>
<th>Factor Items</th>
<th>Possible Score Range</th>
</tr>
</thead>
</table>
| **Factor 1** Competence and Autonomy | • Individuals in my profession are well-trained  
• Individuals in my profession demonstrate a great deal of autonomy  
• Individuals in other professions respect the work done by my profession  
• Individuals in my profession are very positive about their goals and objectives  
• Individuals in my profession are very positive about their contributions and accomplishments  
• Individuals in other professions think highly of my profession  
• Individuals in my profession trust each other’s professional judgment  
• Individuals in my profession are extremely competent | 16-96                |
| **Factor 2** Perceived Need for Cooperation | • Individuals in my profession need to cooperate with other professions  
• Individuals in my profession must depend upon the work of people in other professions | 12-72                |
| **Factor 3** Perception of Actual Cooperation | • Individuals in my profession are able to work closely with individuals in other professions  
• Individuals in my profession are willing to share information and resources with other professionals  
• Individuals in my profession have good relations with people in other professions  
• Individuals in my profession think highly of other related professions  
• Individuals in my profession work well with each other | 15-90                |
| **Factor 4** Understanding of Other Professions | • Individuals in my profession have a higher status than individuals in other professions  
• Individuals in my profession make every effort to understand the capabilities and contributions of other professions  
• Individuals in other professions often seek the advice of people in my profession | 12-72                |
# Attitudes Scale

## Attitudes Toward Healthcare Teams Scale Items Organized by Factor

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<th>Factor Items</th>
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</tr>
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| **Factor 1**    | Working on teams unnecessarily complicates things most of the time  
                  The team approach improves the quality of care to patients  
                  Team meetings foster communication among team members from different disciplines  
                  Patients receiving team care are more likely than other patients to be treated as whole persons  
                  Working on a team keeps most health professionals enthusiastic and interested in their jobs  
                  Developing a patient care plan with other members avoids errors in delivering care  
                  Health professionals working on teams are more responsive than others to the emotional and financial needs of patients  
                  The give and take amount team members help them make better patient care decisions  
                  Hospital patients who receive team care are better prepared for discharge than other patients  
                  In most instances, the time required for team meetings could be better spent in other ways  
                  The team approach makes the delivery of care more efficient  
                  Developing an interdisciplinary patient care plan is excessively time consuming  
                  Having to report observations to the team helps team members better understand the work of other health professionals | 0-70                 |
| **Factor 2**    | Physicians have the right to alter patient care plans delivered by the team  
                  A team's primary purpose is to assist the physician in achieving treatment goals for patients  
                  Physicians, as a rule, are team players  
                  The physician should not always have the final word in decisions made by health care teams  
                  The physician has the ultimate legal responsibility for decisions made by the team  
                  Physicians are natural team leaders | 0-30                 |
Preliminary Results

• Medical student attitudes are different from pharmacy student attitudes at baseline
  – As a general rule, medical student attitudes are less positive toward teamwork than pharmacy student attitudes

• Medical student and pharmacy student attitudes are impacted differently by the required IPE activities
Panel Discussion
Panel Discussion Questions

• What challenges/obstacles did you encounter when trying to implement IPE activities within your curriculum?
  – How did you overcome them?
  – What would you do differently in retrospect?

• What advice would you give someone interested in implementing IPE activities?

• What do you think is the future of IPE within your curriculum?