

INTERPROFESSIONAL EDUCATION: A PRIMER FOR PARTNERING WITH A COLLEGE OF MEDICINE

Northeastern Ohio Universities Colleges of Medicine and Pharmacy
Lois Margaret Nora, M.D., J.D.; President and Dean
David D. Allen, PhD; Dean
Moderator: Robb McGory, Pharm D; Executive Associate Dean
Mark Penn, M.D.; Senior Vice President for Academic Affairs and
Executive Associate Dean

Program Content

- Establishing a partner
 - Presenter: Dr. Nora
- Planning for success
 - Presenter: Dr. Allen
- Topic: Lessons learned
 - Presenter: Dr. McGory
 - Presenter: Dr. Penn
- Panel Discussion



Goals

As a result of attending this presentation, the educator will be able to:

- 1) Identify a health care training program to combine resources for interprofessional education
- 2) Select specific didactic and experiential portions of curriculum to apply interprofessional education
- 3) Select specific instructors from each college to co-direct interprofessional courses
- 4) Modify grading policies to allow students with different abilities, skills and attitudes to successfully pass interprofessional courses
- 5) Modify interprofessional courses when the need for intervention is identified



ESTABLISHING A PARTNER

Dr. Lois Margaret Nora, M.D., J.D.
President, Dean of the College of Medicine
Northeastern Ohio Universities Colleges of Medicine
and Pharmacy

PLANNING FOR SUCCESS

David D. Allen, RPh, PhD
Dean, College of Pharmacy
Northeastern Ohio Universities Colleges of Medicine and
Pharmacy

Phases of Planning

- ▣ Identifying and overcoming barriers
- ▣ Identifying key leaders in respective colleges
- ▣ Recognizing curricular overlap
- ▣ Interprofessional Education plan

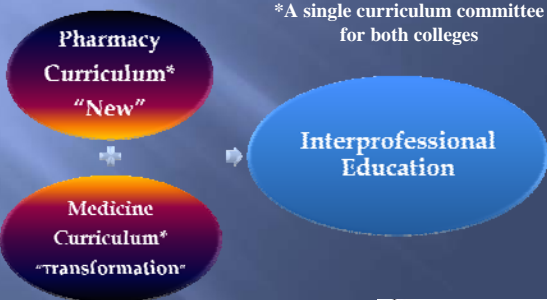
Barriers to Interprofessional Teams

- ❑ Educational preparation
- ❑ Role ambiguity and incongruent expectations
- ❑ Authority
- ❑ Power
- ❑ Ego
- ❑ Status
- ❑ Autonomy
- ❑ Personal characteristics of members
- ❑ Inter-program scheduling
- ❑ Cost

Overcoming Barriers to Interprofessional Teams

- ❑ Institutional support
- ❑ Preparing the workforce
 - Redesign curriculum
 - Restructure clinical training
 - Develop interprofessional teams
 - Communicate across professions
 - Use evidence-based practices

Interprofessional Education Plan



Interprofessional Education Plan

- ▣ Faculty from multiple disciplines teach students
- ▣ Large lecture classes
- ▣ Small group settings
- ▣ Teams of students
- ▣ Interprofessional team training
 - Didactic and experiential settings

Interprofessional Education Settings



Identifying Key Leaders In Respective Colleges

- ▣ Planning Personnel
 - Administrators
 - ▣ Chair of Curriculum Committee
 - ▣ Department Chairs
 - ▣ Education specialists
 - Faculty
 - ▣ Course directors
 - ▣ Course Co-directors

Identifying Key Leaders In Respective Colleges

- Method
 - Off campus symposium
 - Small group meetings
- Goal
 - Common needs for student learning
 - Plan to share workload

Identifying Key Leaders In Respective Colleges

- Educational Leadership Group:
 - Deans, College of Pharmacy and Medicine
 - Executive Associate Deans, Pharmacy and Medicine
 - Associate Dean, Health Professions Education*
 - Assistant Dean, Student Affairs and Admissions
 - VP of Strategic Alliances and Chief of Staff

**Position responsible for IPE implementation*

Educational Leadership Group

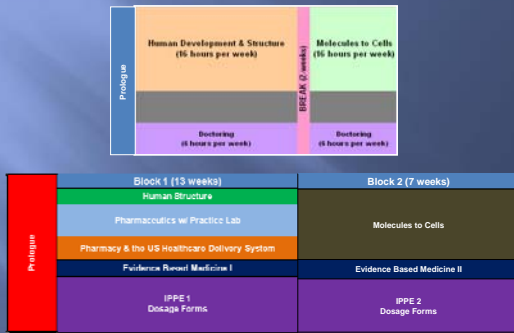
- Rules:
 - Scheduling will NOT preclude Interprofessional Education from occurring.
 - Professional Egos will be checked at the door.
 - Interprofessional Education will be maximized and exceed 50% curricular overlap

Recognizing Curricular Overlap

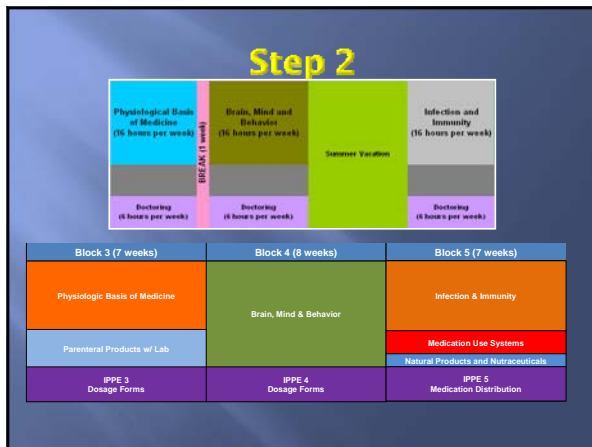
- Analysis of established curriculum
 - Which courses serve both colleges
- Integration of interprofessional courses into pharmacy curriculum
 - Placing of interprofessional course within curriculum should not disrupt natural flow of curriculum
 - Profession specific courses should enhance value of interprofessional courses



Step 1



Step 2



Interprofessional Education Plan

- ❑ Appoint co-directors for interprofessional courses
- ❑ Co-directors discuss
 - Course content
 - Teaching strategies
 - Mix of interprofessional faculty members
 - Assessments
- ❑ Involve faculty member who can oversee entire curriculum
 - Optimizes integration
 - Reduces conflicts in content, assessments, class assignments



Interprofessional Education Plan

- ❑ Recruit feedback on course progression
- ❑ Assess student satisfaction
- ❑ Identify growth of interprofessional relationships
- ❑ Don't be afraid to make changes to improve student outcomes



Interprofessional Education Plan

- ❑ Putting it into place . . .



LESSONS LEARNED

Robb McGory, M.S., Pharm.D.
Executive Associate Dean
College of Pharmacy


Initial Interprofessional Curriculum

- Interprofessional courses
 - Prologue (Introduction to Professionalism)
 - Molecules to Cells (Medical Biochemistry)
 - Physiologic Basis of Medicine (Medical Physiology)
 - Brain, Mind and Behavior (Medical Neurology)
 - Infection and Immunity (Medical Microbiology)
- Interprofessional experiential programs
 - Heart case
 - Interprofessional Learning Teams
 - OSCEs



Results After Two Years


- Classroom performance
 - Lectures, assignments and exams are same for pharmacy and medical students
 - Pharmacy average consistently 10-12 points lower than medical student
 - Per student survey: sitting in class together does not foster interprofessional growth
- Experiential performance
 - Students educate each other to the focus of their respective profession
 - Active learning fosters trust and dependence between professions



CHALLENGES ENCOUNTERED

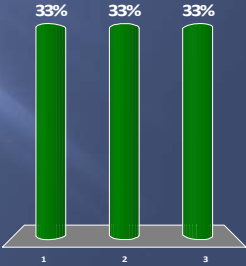
Observation

- The campus has limited classroom space with a single facility capable of holding an interprofessional class of medical and pharmacy students.
 - Class size
 - Medicine: 120 students
 - Pharmacy: 75 students
 - M3, M4 and P4 are assigned to clinical sites for experiential program
 - Return to campus for periodic class




The campus has limited classroom space. To remedy this situation, you would focus on:

1. Modify the facility
2. Use technology to enable students to learn outside the intended classroom
3. Concentrate classes and rotate morning or afternoon classes depending on student year



Option	Percentage
1. Modify the facility	33%
2. Use technology to enable students to learn outside the intended classroom	33%
3. Concentrate classes and rotate morning or afternoon classes depending on student year	33%



Modify Facility

- ❑ Short range plan
 - Modify classroom to seat 200 students
- ❑ Long range plan
 - Build new lecture halls


Use of Technology To Reach More Students

- ❑ Create video streams of lectures
- ❑ Broadcast lecture into several lecture halls
- ❑ Create on-line courses

Coordinate Classroom Schedule

	P1	P2	P3
Morning activity	Didactic learning*	IPPE activities* (Medication Use Systems)	Didactic learning*
Afternoon activity	IPPE activities* (Dosage Forms)	Didactic learning*	IPPE activities* (Patient Safety)


* Interprofessional experiences



Northeastern Ohio University
COLLEGES OF MEDICINE & PHARMACY

Observation

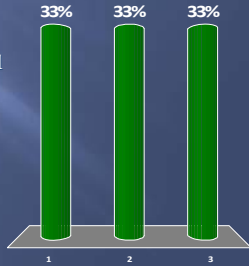
- ❑ Pharmacy students are expected to purchase a computer. All teaching material is electronic and posted on line using course management software. Students can print material at their own cost. Medical students are encouraged to purchase a computer while teaching materials are printed and made available for student purchase.



Northeastern Ohio University
COLLEGES OF MEDICINE & PHARMACY

Students are provided different teaching material. To remedy this situation, you:

1. Make printed material available to all students
2. Eliminate printed material and place electronic files on-line
3. Post limited files and expect students to take notes in class and use textbook as source of knowledge



Provide Printed Material

- ❑ Students slow to transition to electronic files
 - Requires timely posting of electronic files
 - Consumes college printers to print copy
- ❑ Copyright laws limit usefulness of printed material
- ❑ Monetary loss if copies are not purchased

Post Electronic Material

- ❑ Conversion to copyright compliant files
- ❑ Encourage use of tablet computers to take notes
- ❑ Encourage students to use textbooks

Revert To Note Taking And Dependence Upon Textbooks

- ❑ Technology has increased the amount and complexity of material that can be discussed in class
- ❑ Copyright laws place strict limitations on posted / printed material

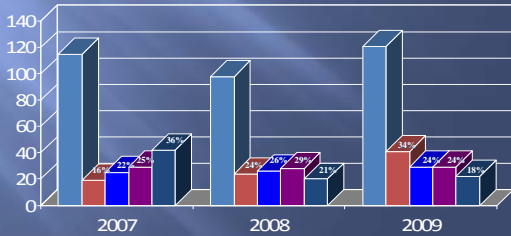
Observation

- Pharmacy students consistently achieve grades that are 10-12 points less than medical students when taking the identical exam. The cut off for passing any assessment is 70%. The majority of pharmacy students can not successfully meet the same grade expectation as medical students.



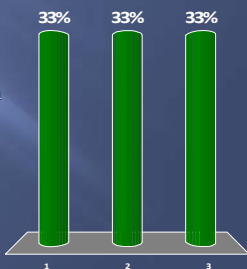
College of Medicine Credentials of Incoming Class

- Total COM Graduates
- Magna Cum Laude
- Cum Laude
- Summa Cum Laude
- Other



Pharmacy students can not meet the same grading expectations as medical students. To remedy this situation, you:

- Lower acceptable passing limits to 60% for Pharmacy students
- Create separate exams for each profession
- Create statistical limitations of passing to be 1.5 standard deviations of the class mean



Lower Expectations For Passing to 60% for Pharmacy students

- ❑ Faculty discomfort in accepting lower standard
- ❑ Randomly chosen number doesn't insure learning

Create Separate Exams For Each Profession

- ❑ Increases faculty workload
- ❑ Quality of exams may differ between professions
- ❑ Create exam with common questions but also include profession specific questions to neutralize differences?

Use Statistics To Compare Students To Their Peers

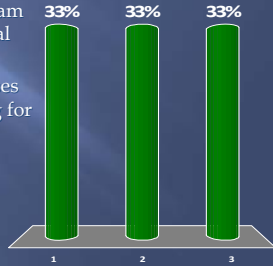
- ❑ Standard
 - Passing: 1.5 standard deviations below the class mean or 70, whichever is lower
- ❑ Continues discomfort of student passing with a low exam score

Observation

- ❑ Students are separated into their respective professional courses at various times in the curriculum. This separation causes distance and lack of interprofessional growth. Students lose focus of the partnership and friendship between professions.

Separation of didactic classes hinders interprofessional growth. To remedy this situation, you focus on:

1. Enhance experiential program to continue interprofessional contact
2. Create interprofessional cases to enhance decision making for patient centered care
3. Encourage student clubs / social events to maintain relationships



Enhancement of Experiential Program

- ☐ Establishment of interprofessional learning teams
 - Responsible for health of a geographic area
 - Create project to impact 1 of 10 preventable causes of death

Interprofessional Cases

- ☐ Create complex cardiac case
 - ☐ Students need to experience components of care involved within the case
- ☐ Coordinate medical student exam of standardized patient with pharmacy student dispensing exercise

Encourage Interprofessional Student Clubs

- ☐ Optimize social contact
 - Sports leagues
 - Campus events
- ☐ Health fairs

BENEFICIARIES OF SUCCESS

Mark A. Penn, M.D.
Senior Vice President for Academic Affairs
Executive Associate Dean, College of Medicine
Northeastern Ohio Universities Colleges of Medicine
and Pharmacy

Beneficiaries of Success

- Learning
- Teaching
- Patient Care
- Accreditation



Impact on Learning

(Expansion of Curriculum
Application of Knowledge)

- Growth of critical thought process early in curriculum
 - Evidence based medicine
 - Clinical case studies
- Growth of communication skills
 - Cultural competence
 - Ethics in health care
 - Spanish for healthcare providers



Impact on Learning

(Expansion of Curriculum
Addition of Skills Development)

- ▣ Development of longitudinal curriculum
 - Organization of experiential expectations
 - Insertion of clinicians to oversee cases
- ▣ Interprofessional skills development
 - Enhancement of OSCEs
 - Scenarios require medical and pharmacy student information exchange
 - Smoking cessation
 - Enhance function of interprofessional learning teams
 - Immunization
 - Establishes opportunities for screening and seasonal immunization clinics
 - Pharmacy and medical students help one another



Impact on Teaching

- ▣ Active learning
 - Increasing use of case studies in basic science courses
 - Growth in small group learning
 - Downsizing of course material
- ▣ Technology in classroom or assignments
 - Electronic resources
 - Elimination of paper in classroom
 - Decreased cost of printing
 - Orientation to databases
 - On-line examinations
 - Web based team conferences



Impact on Community

(Expansion of Curriculum
Interprofessional Learning Teams)

- ▣ Students
 - Mixture of medical and pharmacy students
 - Responsible for health of geographical area
 - Assess population, infrastructure, health needs
 - Create project for improving community health
- ▣ Faculty
 - Team course development
 - Synergies
 - Grant submitted to fund student projects
 - Research
- ▣ Broader Community



Impact on Patient Care

- ❑ Institute of Medicine
- ❑ Too early to measure outcomes
- ❑ Community educator program
 - Pharmacy students work with retired college personnel
 - Monitor and educate individuals on health / medications
 - Prolongs sense of belonging to college community

Impact on Accreditation

- ❑ Communication with ACPE, LCME, NCA
- ❑ Utilization of resources
 - Student support services
 - Faculty numbers/workload
 - Teaching facilities
 - Rootstown
 - Clinical
 - Budget
- ❑ Influence on curriculum
 - Student outcomes
 - Courses

Summary

- ❑ Northeastern Ohio Colleges of Medicine and Pharmacy has established a successful interprofessional curriculum
- ❑ Success requires detailed preparation
- ❑ Mistakes will be made, be ready to adjust
- ❑ Don't be afraid of change

DISCUSSION

Given What We Now Know, Would We Do It Again?



Northeastern Ohio University
COLLEGE OF MEDICINE & PHARMACY

Questions From The Audience



Northeastern Ohio University
COLLEGE OF MEDICINE & PHARMACY
