UNIVERSITY OF SOUTH FLORIDA
GERIATRIC WORKFORCE
ENHANCEMENT PROGRAM
(GWEP)
FACULTY
DEVELOPMENT
MASTERWORKS
SERIES

Kathryn Hyer, PhD, MPP
Principal Investigator

For additional information about this and other USF GWEP offerings, email amaynard@health.usf.edu

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health & Human Services (HHS), under grant #U1QHP28739, USF Geriatric Workforce Enhancement Program for $2.24 M. This information or content and conclusions are those of the presenter and should not be construed as the official position or policy of, nor should any endorsements be inferred by, HRSA, HHS or the U.S. Government.
Geriatrics Rocks!
(in Little Rock)

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Disclosure

- Co-editor of geriatric pharmacotherapy textbook “Fundamentals of Geriatric Pharmacotherapy” 1st and 2nd editions

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Objectives

- Describe opportunities for didactic and active learning activities with Geriatric emphasis
- Outline the components of four interprofessional education opportunities focused in Geriatrics
Evolution of Geriatric Education at UAMS
Geriatric Pharmacy Education

- Integrated Curriculum
- Stand-alone Geriatric Elective
- Other Companion Electives
  - Death and Dying
  - Drug-Induced Diseases
- Extracurricular Opportunities
  - Summer Research Scholarships
Early Didactic Curriculum

- Communications
  - Older Adults
  - Lectures/Simulations

- Clinical Pharmacokinetics in Older Adults
  - Absorption, Distribution, Metabolism & Excretion problems illustrated by cases
  - Pharmacodynamics and Interactions
  - How to evaluate new drugs
U.S. Healthsystems for Pharmacists

- Medicare Part D
  - 2 hour lecture
- Walk through Medicare.gov “Find health & drug plans”
  - Middle income, Low income, Dual eligible, Low income subsidies, Medicare Advantage
- Medication Therapy Management
  - History of policy changes pushed by needs of older Americans
Figure 5

Standard Medicare Prescription Drug Benefit, 2017

<table>
<thead>
<tr>
<th>BENEFIT PHASE:</th>
<th>TOTAL DRUG SPENDING:</th>
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</thead>
<tbody>
<tr>
<td>Catastrophic Coverage</td>
<td>$8,071</td>
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<td></td>
<td>$8,000</td>
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<td></td>
<td>$1,000</td>
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<tr>
<td>Deductible</td>
<td>$0</td>
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</tbody>
</table>

- **Catastrophic Coverage Threshold** = $8,071 in Estimated Total Drug Costs
  - Initial Coverage Limit = $3,700 in Total Drug Costs
  - Deductible = $400

NOTE: Some amounts rounded to nearest dollar. ¹Amount corresponds to the estimated catastrophic coverage limit for non-low-income subsidy (LIS) enrollees ($7,425 for LIS enrollees), which corresponds to True Out-of-Pocket (TrOOP) spending of $4,950, the amount used to determine when an enrollee reaches the catastrophic coverage threshold in 2017.

Case Study #1

Ernest is a widower who lives in Mena, AR, 71953 and will turn 65 years old next month. He has signed up for Medicare Parts A/B. He has no outpatient drug coverage and is not eligible for additional help (LIS). He would like information on stand-alone PDPs. He uses Walmart pharmacy.

Current Meds: metoprolol 50mg bid, Diovan HCT (generic) 160/12.5 daily, Advair Diskus 250/50 bid
Case Study #2

- Ms. Wanda has both Medicare & Medicaid and she lives in Zipcode 72204. She asks which Part D plan is best for her. She has been using the Medic Pharmacy on 12th St in LR.

- Meds: Citalopram 20 mg Daily, Donepezil 23mg HS, Lorazepam 0.5 mg BID PRN anxiety, Toviaz 4mg HS
Case Study #3

Ms. Joanne recently moved in with her daughter (Zipcode 72223). She asks what MA plans would be best for her in new location. She does not receive LIS, but wants to use Cornerstone or Kroger Pharmacy. Interested in dental and vision coverage.

Meds: Lisinopril 20mg daily, Crestor 10mg daily, Toprol XL 50mg daily, Sertraline 50mg daily, Pradaxa 150mg BID
P3 Year: Required Courses

- Therapeutics: Neurology/Geriatrics Section
  - Neurology-Epilepsy, Headache, Sleep
  - Geriatrics Pharmacotherapy Concepts
  - Alzheimers Disease and other Dementias
  - Parkinsons Disease
  - Pressure Ulcers

- Patient Assessment
  - Family including Grandparents
Geriatric Therapeutics
Foundational Lectures

- Biology of Aging
- Geriatric Assessment (Active Learning)
- Medicare, Medicare Part D Refresher
- Adverse Drug Events
- Quality Prescribing
- Comprehensive Medication Review
- Nursing Homes & Consultant Pharmacy
- Hospice & Palliative Care
Varied Lectures from Student Interests

- Geriatric Syndromes
  - Dementia/Delirium
  - Falls
  - Malnutrition
  - Sleep

- Health Promotion/Disease Prevention
  - Immunizations
  - Vitamins/Dietary Supplements
  - Nutrition
Elective Active Learning Activities

- Adopt-A-Patient
- Medicare Part D Planning Clinic
- Adverse Drug Events Journal Article
- Geriatric Medication Simulation Game
Adopt-A-Patient

- 3 visits (1 per month) with older adult
  - Visit 1: Learn about person
  - Visit 2: Perform assessments
  - Visit 3: Review medications
- Presentation as the “final” for the course
  - Description of person and visits
  - Provide results and interpretation of assessments
  - Review medication list with assessment
  - Review a disease state and its treatment
Medicare Part D Planning Clinic

- October/November Open Season
- Organizing the Clinic
  - Days, Scheduling, Marketing
- Preparing for the Clinic
  - Handouts, Calls, Signs
- Providing the Clinic
  - A 4 hour session replaces 2 hours class time
Adverse Drug Events Journal Article

- Presentation uploaded in BlackBoard
- Critique 4 other Students’ Presentations
- Upload in BlackBoard
Geriatric Medication Game
Intergenerational Volunteer Award
Advanced Experiential Opportunities

- Institute on Aging Rotations
  - Acute Care Geriatric Consult Service
  - Ambulatory Care Longevity Clinic
- Monthly rotation
  - Required 160 hours
Joint Rotation Activities

- **Journal Club**
  - Select articles from master list

- **Adopt-A-Patient**
  - Visit weekly in patient home or clinic X 3
  - Presentation during 4th week
Other Exposures-LTC

- State Veterans Nursing Home
- 1-2 days
  - Greenhouse philosophy
  - 8 buildings will have 12 residents in each
Post-Graduate Education

- PGY1 - M.Ed. Geriatric Pharmacy Residency (over 2 years)
- PGY2 Geriatric Pharmacy Residency
Other Exposures

- Hospice - 1-2 days
  - Visit to Acute Hospice

- Coumadin Clinic
  - Longevity Clinic
  - 4 hour clinic

- Writing Assignment
  - AGEC Newsletter Column
  - Teaching Case
IPE Activities

- Home Health Simulation
- Pharmacotherapy Workshop
- Palliative Care/Hospice
- IPE Grant Mental Health
Home Health Simulation

- Medicine/Nursing/Pharmacy
- Clyde Jenkins
- Home visits & Staffing meeting
Simulation Fosters Interprofessional Skills among Nursing, Pharmacy and Medical Students

L.C. Hutchison,* P.S. Ragsdale, S.N. Berryman, T.J. Bilbruck*
University of Arkansas for Medical Sciences
*College of Pharmacy, College of Nursing, College of Medicine

Background
Opportunities to learn effective team skills in the entry-level curricula are sparse. We sought to integrate human patient simulators and an interprofessional educational experience to train nursing, pharmacy and medical students assessment and interprofessional skills in their geriatric curricula.

Methods
Two unfolding cases provided simulations for nursing students (N4s) in their geriatric course. N4s alternatively performed assessments on the simulated patient or watched via remote camera. Following this, pharmacy (P4s) and medicine (M4s) students joined the N4s for a simulated staff meeting. N4s presented their findings and assessment, answering questions from the other disciplines. The staff meeting ends with a delineated plan of care for the patient. The case continues to unfold with the patient’s arrival at the simulated emergency department. N4s perform initial assessment of the simulated patient and are joined by the P4s and M4s to continue assessment and implementation of a new plan of care. The simulation ends with initiation of antibiotics for treatment. At the conclusion of the simulation, students meet to discuss what went well and what could be improved.

Timeline

<table>
<thead>
<tr>
<th>Morning Session</th>
<th>Afternoon Session</th>
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<tbody>
<tr>
<td>N4 students start alone</td>
<td>M4 and P4 students join group</td>
</tr>
<tr>
<td>Orient &amp; cover objectives</td>
<td>Orient &amp; cover objectives</td>
</tr>
<tr>
<td>Split into 2 groups</td>
<td>Listen to home health scenario</td>
</tr>
<tr>
<td>Listen to scenarios</td>
<td>Conduct Home Health Staffing</td>
</tr>
<tr>
<td>3 students assess pts</td>
<td>Fast-forward 5 weeks to next scenario</td>
</tr>
<tr>
<td>One pt is a home health pt</td>
<td>3 N4 students assess pt in ER</td>
</tr>
<tr>
<td>One pt is in the hospital</td>
<td>Other N4s watch on monitor</td>
</tr>
<tr>
<td>Others watch on monitor</td>
<td>M4 &amp; P4 students join simulation</td>
</tr>
<tr>
<td>Re-group and debrief</td>
<td>Re-group and debrief</td>
</tr>
</tbody>
</table>

Results
69 students participated in 6 sessions of 9-13 students. There were 53 N4s, 7 P4s, 3 post-graduate year 1 pharmacy residents and 6 M4s.

Conclusion
Combining high-fidelity patient simulations of geriatric patients with interprofessional interactions was well-received by students from nursing, pharmacy and medicine. This process allows students from multiple professions to learn and practice different team skills prior to beginning their professional practice.

Reference
Unfolding Cases adapted from the National League for Nursing Simulation Innovation Resource Center
Interprofessional Simulation Experience

Berryman, S.N., DNP, CNS-BC; Ragsdale, P.S., MSN, CNS-BC; Hutchison, L.C., PharmD; Bilbruck, T.J., MD, Huff, D.C., MNSc; RN; Jennings, J., MSN, RN; Lofton, T. MSN, RN; Rainey, L.M., MSN, RN

Problem and Purpose
The expectation for healthcare professionals to work collaboratively is complicated by the fact that students are educated almost exclusively within their own discipline. The purpose of this project was to examine the impact of shared simulation learning experiences for students from multiple healthcare disciplines.

PICO Format Question
In pre-licensure nursing, pharmacy, and medical students, does shared participation in human simulation scenarios provide a more meaningful, authentic and effective educational experience than traditional methods of printed material and role play exercises to team communication and team building skills?

EBP Model/Process
The ACE Star Model of Knowledge Transformation containing elements of discovery, summary, translation, integration, and evaluation is the model used.

Relevant Literature
- Human patient simulations provide opportunities for learning and practicing complex skills in a safe environment.
- Unfolding Care help students understand the evolving and complex care needs of the geriatric client and family (National League for Nurses, 2010).
- Future of Nursing report (Institute of Medicine, 2010) emphasized teamwork and collaboration in undergraduate education.
- Shredel (2011) reported pharmacy and medical student satisfaction with shared simulated learning exercises.

Student Participants
- Nursing
- Pharmacy
- Medicine

Method
- Teams consisting of 7-10 nursing students, 1-2 medical students, 1-2 pharmacy students, and 3 faculty facilitators rotated through the simulated scenarios.
- Unfolding Care character selected for the was Red Yoder.
- Nursing students simulated an initial home visit to assess Mr. Yoder’s diabetic foot ulcer; then shared assessment findings with medical and pharmacy students in a team conference and students collaboratively developed a plan of care
- Interprofessional conference consisted of nursing mediciene, and pharmacy students who assessed Mr. Yoder in an ED simulation and worked through the scenario involving typical presentation of sepsis.
- Information was communicated using the SBAR framework (Situation, Background, Assessment and Recommendation) and each scenario was followed with debriefing to allow students to verbalize their perceptions and findings.

Results
The teaching methods used in the simulation were helpful & effective

Outcomes
- Debriefing was rich with conversations about diagnostic conclusions, treatment plans, best practice standards, patient resources, and scope of practice.
- In reflective notes later submitted to faculty, students described having a deeper understanding of the inter-related roles of the healthcare team members.
- Most students suggested there should be more experiences like this throughout their training.

Conclusions
- Positive outcomes from this project indicate innovative interprofessional simulations are more meaningful, realistic, and effective strategies than readings and role play in developing interdisciplinary communication and teamwork.
- Exercises like these could provide pre-licensure students with an opportunity to learn essential skills needed for collaborative practice.

References
1. Institute of Medicine, 2010
2. National League for Nurses, 2010

*University of Arkansas for Medical Sciences College of Nursing; †University of Arkansas for Medical Science College of Pharmacy; ‡University of Arkansas for Medical Sciences Simulation Center
Pharmacotherapy Workshop

- Medicine/Pharmacy
- Beers List Review & Application
- Rotate monthly presentation with
  - Clinic pharmacist
  - Pharmacy residents (Teaching Certificate)
CASE B

Mr. X is a 92M with HTN, CAD (s/p DES to LCx 10y ago), COPD, diabetes, depression, and moderate dementia presenting for a new patient visit unaccompanied. Only complaints are fatigue, occasional lightheadedness, constipation, and urinary retention.

**Height:** 5’10”  
**Weight:** 158 lbs  
**Allergy:** NKDA

- **Vitals:**
  - BP: 165/88
  - HR: 50 bpm
  - RR: 16
  - \( O_2 \) Sat: 99% on room air

- **Current medications:**
  - Metoprolol tartrate 50mg po BID
  - Lisinopril 10mg po daily
  - Aspirin 81mg po daily
  - Clopidogrel 75mg po daily
  - Simvastatin 20mg po qhs
  - Advair 250/50 1 puff BID
  - Glipizide 5mg po daily
  - Paroxetine 50mg po daily
  - Donepezil 10mg po daily
  - Ranitidine 150mg po BID
  - Terazosin 5mg po qhs
  - Acetaminophen 650mg po TID
  - Loratidine 10mg po daily

**BMP:**
- Na: 130
- K: 4.4
- Cl: 102
- \( CO_2 \): 25
- BUN: 21
- Scr: 1.5
- Glucose: 67

**CBC:**
- WBC: 5.2
- Hgb: 14.7
- Hct: 45.1
- PLTs: 316
- A1C: 6.2
Palliative Care/Hospice

- Medicine/Pharmacy
- Weekly Discussion or Site Visits
IPE Curriculum at UAMS

IPE Triple Aim Curriculum at UAMS

EXPOSURE (NOVICE)
- ½ day workshop
- Content: Triple Aim, PFCC, Health Literacy, Cultural Competence, SDOH, etc

IMMERSION (INTERMEDIATE)
- Triple aim Project
- IPE Simulation

Bridge activity: Common book, Clinical rounds, 12th St HWC Center, reflection

Bridge activity: Evaluation, reflection

COMPETENCE (ADVANCED)
- ½ day workshop
- Practice Activity
- Student Educator Activity
IPE Grant Mental Health

- Nursing/Pharmacy students
  - 4\textsuperscript{th} year Pharmacy students
  - APRN Nursing students

- Modules
  - Depression screening/diagnosis/mgmt
  - Pharmacologic Rx
  - Cultural Issues

- Simulation—2 hour
  - Evaluate patient and develop care recommendations

- Patient Assessments—2017-18
# Integration of IPE Grant into Existing UAMS Curriculum

<table>
<thead>
<tr>
<th>Exposure Phase (Key Concepts)</th>
<th>Immersion Phase (IPE Teams)</th>
<th>Competence Phase (Entry into Practice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triple Aim</td>
<td>Patient Care Improvement</td>
<td>Complete a Project Activity-Simulation Health Fair etc</td>
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<td>IPE Domains</td>
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<td>Patient-Centered Care</td>
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<td>Social Determinants of Health</td>
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<td><strong>Additional:</strong></td>
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<td>Integrated IPE Curriculum</td>
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<td>Exposure Workshops</td>
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<td>Depression Screening &amp;</td>
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<tr>
<td>Service Learning</td>
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<tr>
<td>Faculty developed: Mental</td>
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<tr>
<td>Health Disparities &amp;</td>
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<td>Geriatric Pharmacology</td>
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<td>Responsive Design</td>
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<td>develop a proposal to</td>
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<tr>
<td>eliminate mental health</td>
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<td>Interprofessional Service Learning</td>
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<td>Activity with Community Dwelling</td>
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<td>Simulation Mental Health</td>
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<tr>
<td>Scenarios</td>
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</tbody>
</table>

*UAMS*: University of Arkansas for Medical Sciences
 GWEP
Arkansas Geriatric Education Collaborative

- Health Professionals & Paraprofessionals
  - Mentors & Scholars program
    - Online self-study
  - Video-teleconferences
    - Quarterly 2 hour continuing education
  - Summer Institute for Faculty
    - Annual 1 week program-didactic + experience
  - Conferences
    - APRN Geriatric Pharmacology-annual
    - Geriatrics & LTC Update-annual
    - Geriatric Grand Rounds-weekly
Arkansas Geriatric Education Collaborative Community Programs

- Diabetes Self-management
- A Matter of Balance
- Alzheimer’s Disease Experience
- Quarterly Newsletter
References/Resources


Berryman SN, Huff DC, Hutchison LC, Bilbruck TJ, Ragsdale PS, Jennings JE, Greenfield TM. Integrating Collaborative Interprofessional Simulation into Pre-licensure Healthcare Programs, Nursing Education Perspectives, 2015; 36: 396-7. doi:10.5480/13-1108


National Center for Interprofessional Practice and Education. https://nexusipe.org/