Brooke Salzman, MD; Lauren Collins, MD; Emily Hajjar, PharmD; Leigh Ann Hewston, PT; Cecelia Borden, EdD, MSN; Tracey Vause Earland MS, OTR/L, Carolyn Giordano, PhD;, Sarah Dallas, BA

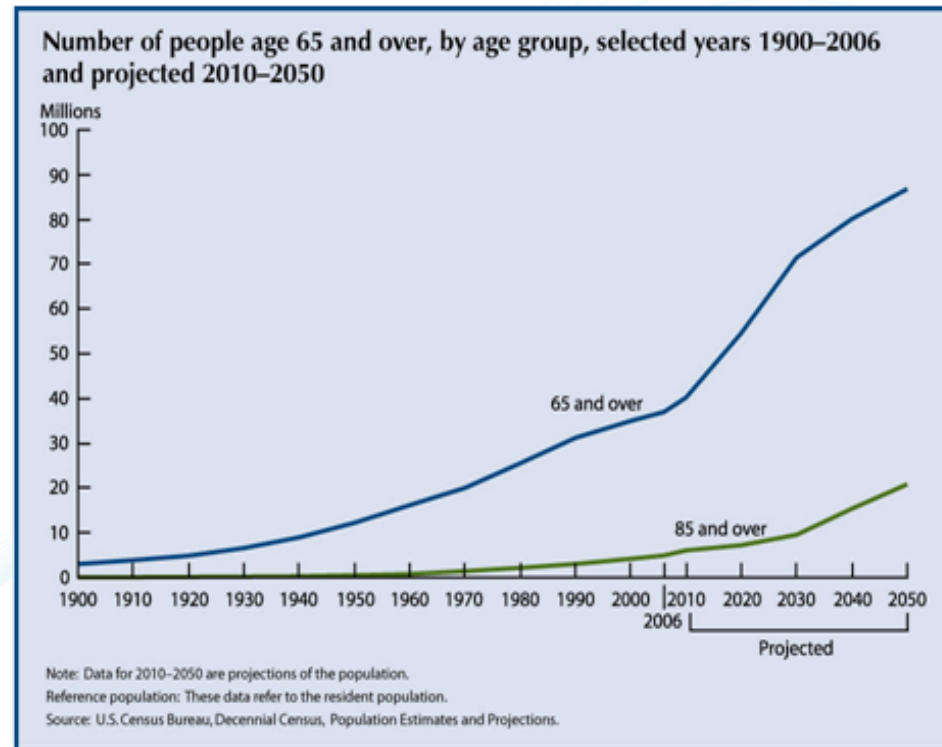# An Interprofessional Geriatric Clinical Skills Fair

Objectives

- Practice teaching skills related to interprofessional education (IPE) and geriatric competencies

- Formulate an Action Plan and prepare to introduce an Interprofessional Geriatric Clinical Skills Fair at their own institutions

- Recognize essential elements of a measurement tool that evaluates the effectiveness of an Interprofessional Geriatric Clinical Skills Fair

Background

- Aging population
  - 1998, 34 million adults $\geq$ 65 years $\rightarrow$ 2030, 71 million
  - By 2030, 25% of population $\geq$ 65 years old
  - Largest growing segment is over 85 age
  - Elderly use a disproportionate number of medical resources

- Institute of Medicine's report in 2008 on "Retooling for An Aging America" calls to enhance the geriatric competence of the entire workforce

- Collaborative interprofessional practice is essential in the care of older adults

Number of people age 65 and over, by age group, selected years 1900–2006 and projected 2010–2050

Note: Data for 2010–2050 are projections of the population.
Reference population: These data refer to the resident population.
Source: U.S. Census Bureau, Decennial Census, Population Estimates and Projections.

Background

- Partnership for Health in Aging – workgroup of healthcare professionals from 10 disciplines convened in 2008 to:
    - Advance recommendations of the IOM report
    - Advocate for ways to meet the healthcare needs of the nation's rapidly growing older population

- Developed a set of "Multidisciplinary Competencies in the Care of Older Adults" in 2009
    - Core competencies in the care of older adults that are relevant to and can be endorsed by all health professional disciplines
        - Dentistry, Medicine, Nursing, Nutrition, Physical Therapy, Occupational Therapy, Pharmacy, Physician Assistants, Psychology, Social Work

Background

- With the recent release of IPE core competencies, as well as the multidisciplinary geriatric competencies, we now have a roadmap for guiding innovation in both IPE and geriatric education

- Now, it is time for educators to realign our current educational system to better prepare health professions graduates through IPE

- Students must develop the knowledge base and skills needed to work as an effective member of a health care team, particularly in regards to caring for older adults

Background

- Clinical skills fair offers a fun, interactive way for learners to gain practical, evidence-based skills and knowledge pertaining to the care of older adults

- Ideal setting for clinically relevant IPE

- Highly rated by learners at various levels of training

Background

- Health Mentors Program: Provides IPE for 1st and 2nd year students from medicine, nursing, pharmacy, PT, OT, family & couples therapy
  - Student requests for more clinically relevant content
  - Student requests to better understand what other health professionals do and how they contribute to care

- First pilot in April 2013
  - 21 student volunteers participated

- Second pilot in April 2014
  - 18 student volunteers participated

Overarching Program Objectives

- Distinguish among, refer to, and/or consult with any of the multiple healthcare professionals who work with older adults, to achieve positive outcomes.

- Communicate and collaborate with different healthcare professionals to incorporate discipline-specific information into overall team care planning and implementation.

IP Geri Skills Fair: Agenda

- Pre-test
- Case presentation
- 4 interactive skills stations
- Case study questions
- Case study discussion/ wrap-up
- Post-test

IP Geri Skills Fair: Case Study

- Evelyn is an 89 year-old woman coming to see you and your team for a geriatric assessment, accompanied to the visit by her daughter

- Evelyn was hospitalized 1 month ago for a stroke that has left her with left-sided weakness

- Today, her daughter is concerned that her mom has lost at least 5 pounds since she was in the hospital, seems more forgetful and less interested in activities she was involved with previously

IP Geri Skills Fair: Stations

- Older patient/caregiver simulation
- Cognitive assessment
- Gait evaluation
- Medication assessment

Station #1: Older patient/caregiver simulation

- Participate in caregiver/ patient simulation to:
  - Describe the impact of health conditions and impairments associated with aging on a person's quality of life and function.

  - Describe challenges associated with being a caregiver as well as being a care recipient.

Station #1: Older patient/caregiver simulation

- Scenario #1
- Visual/Hearing/Sensory Impairment (impact on QOL, difficulty with IADLS)
    - Residents wear "drunk" goggles, shoes with rice inside and garden gloves (or gloves with cotton balls in tips) and are asked to walk over to a desk, open pill bottle, and fill weekly pillbox with correct dosage of medication (may be assisted by a resident "caregiver")

Station #1: Older patient/caregiver simulation

- Scenario #2 – Physical Impairment (impact on QOL, difficulty with ADLS)
  - Residents will have dominant arm bandaged in ace wrap and will be asked to put on a pair of pants, button shirt, comb hair and brush teeth (may be assisted by a resident "caregiver")

Debriefing "getting older" station

- What impairment was most challenging for you and why?
- How did these impairments affect your function, ADLs, IADLs? How might these impact your quality of life?
- How did it feel to receive assistance from a caregiver? How did it feel to be the caregiver?
- How can you apply this to your visits with geriatric patients?
- Based on the results of the case patient's overall functional assessment, what resources or referrals might be appropriate for case patient?
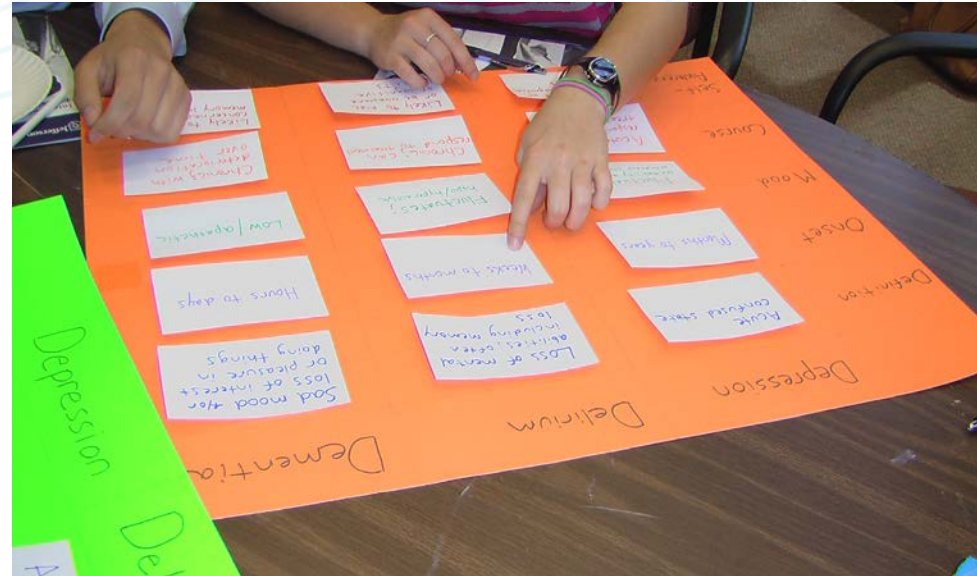
Station #2: Cognitive assessment

- Describe the characteristics of and differentiate between depression, delirium, and dementia in the older adult

- Administer and interpret a validated and reliable tool/instrument appropriate for use with a given older adult to assess cognition and mood.

Station #2: Cognitive Assessment

- Differentiating characteristics of dementia, delirium and depression
  - Race between 2 teams to correctly fill in chart
  - Definition, onset, mood, course, self-awareness

Station #2: Cognitive Assessment

- Role play of scripted tools to learn about and practice administering:
  - GDS: Geriatric Depression Scale, 15 item questionnaire
  - Mini-cog: 3 item recall plus clock draw
  - CAM: Confusion Assessment Method

  - 1 student played role of provider, 1 student played role of patient, and 1 student was responsible for "scoring" tool

  - Reviewed results of cognitive screening tests for case patient

Station # 3: Gait Assessment

- List reasons why assistive devices are prescribed for older adults.

- Identify types of assistive devices and reasons for selecting one type over another for a given patient.

- Administer and interpret the TUG (Timed Up and Go) to assess gait with an older adult.

Station #3: Gait Assessment

- Cane quiz addressing common misuses of canes

- Match the correct assistive device to the case patient

- Timed Up and Go - review and demonstration

Station #3: Gait Assessment

- Apply lesson to case patient
  - Review results of her TUG
  - What assistive device might be a good fit for case patient?

Station # 4: Medication Assessment

- Recognize the principles and practices of safe, appropriate, and effective medication use in older adults.

- Identify commonly prescribed medications that are inappropriate for older adults and explain why such medications are inappropriate.

Station #4: Medication Assessment

- "Brown Bag" case scenario based on presented patient
- Team-based review of medications to identify:
  - Polypharmacy
  - Drug-drug interactions/duplications
  - Potentially inappropriate medication use

Station #4: Medication Assessment

- Based on medication review, what medications should be eliminated to reduce her risk of adverse events and risk of falling?

Assessment and Treatment: Case discussion/Wrap-Up

- Student meet as a large group to review questions
  - What diagnosis does the results of the cognitive testing point you toward?
  - Based on her gait assessment and diagnosis today how might Evelyn benefit from continued PT?
  - Based on her medication review, what medications should be eliminated to reduce her risk of falls/adverse events?
  - Based on the results of her overall functional assessment, what resources or referrals might be appropriate for Evelyn?

Evaluation

- Purpose: to evaluate changes in knowledge of first and second year IP students
- Methods: Pre- and post-test design
  - 8 multiple-choice questions assessing knowledge related to the four stations
  - 4 questions assessing self-reported confidence (0-10) performing specific tasks taught in the fair
    - Completing a timed up and go test
    - Assessing cognition in an older adult
    - Assessing medication use in an older adult
    - Assessing sensory impairment in an older adult

Evaluation

- Post-test with 4 additional qualitative questions:

- Would you like to see an Interprofessional Clinical Skills Fair like this one incorporated as a required part of IPE training at Jefferson?

- Please list 1-2 things that you liked or learned from your participation in this Skills Fair

- Please list 1-2 things that would help to improve this Skills Fair for the future

- What other topics would you like to learn about in a Skills Fair format?

Survey Question - Sample

- *What clinical assessment tool is used to differentiate delirium from other cognitive disorders?*
    - a. *MMSE (mini-mental status exam)*
    - b. *CAM (confusion assessment method)*
    - c. *Mini-cog*
    - d. *GDS (geriatric depression scale)*
    - e. *CDT (clock drawing test)*

Survey Question - Sample

- *Which of the following assistive devices is most appropriate for a patient with a history of stroke with unilateral weakness and a hemi-paretic gait?*
    a. *4-wheeled walker*
    b. *Single point cane*
    c. *Standard walker*
    d. *Wide Based Quad Cane*
    e. *Wheelchair*

Evaluation: Results of Pilot # 2

- 18 students completed pre-test, 17 completed post-test
- 7 medical, 3 nursing, 4 OT, 3 PT, and 1 pharmacy student/s
- Comparison of pre and post-test averages showed notable score improvement
- Numbers too small to compare disciplines

Pre-Test	68%
Post-Test	94%

Evaluation: Results of Pilot # 2, cont

- Confidence Ratings:
  - Complete a TUG: <u>16/16 (100%)</u> reported increase in confidence
  - Assess cognition: <u>16/17 (94%)</u> reported increase in confidence
  - Assess medication use: <u>15/17 (88%)</u> reported increase in confidence
  - Assess sensory impairments: <u>13/17 (76%)</u> reported increase in confidence

Qualitative Questions

- 88% of students responded "yes" to the question:
- Would like to see a "fair like this one" included as a mandatory part of IPE training?
- Please list 1-2 things that you liked or learned from your participation in this Skills Fair:
  - Several stated liking various aspects of content like learning about mobility devices, cognitive screening tests, medication use
  - *"I liked this session because it provided concrete skills that are helpful for my profession, while also getting a good idea of other health fields and how we can all work together."*

Qualitative Questions

- Please list 1-2 things that would help to improve this Skills Fair for the future:
  - More time at stations
  - Actual patients
  - Make it a requirement for HMP!
  - More disciplines involved
- What other topics would you like to learn about in a Skills Fair format?
  - "Any hands on topic"
  - Rehab, peds, hospital cases, mental health
  - "Anything, please keep things like this coming!"

Lessons Learned

- Strengths:
  - Highly effective teaching model that is fun, easy to replicate
  - Addresses both Geri and IPE competencies
  - Ideal setting to introduce IPE, practice teamwork
- Challenges:
  - Time intensive for faculty
  - Faculty development in IPE
  - Busy curricular schedules
  - Scheduling logistics across 6+ disciplines

Next Steps...

- Expand fair
    - Increase # of students trained in HMP
    - Consider adding disciplines
    - Modify pilot for different level learners
- Evaluation changes
    - Evaluate pre/post assessment by discipline
    - Longitudinal assessment
    - Evaluate specific IPE competencies

Questions? Contact Us!

Lauren Collins, MD
Associate Director, Jefferson InterProfessional Education Center(JCIPE)
Director, Jefferson Health Mentor Program
Lauren.Collins@jefferson.edu

Brooke Salzman, MD
Associate Professor
Program Director, Geriatric Fellowship
Brooke.Salzman@jefferson.edu

Health Mentors/JCIPE website info
http://jeffline.jefferson.edu/jcipe