

# Training OT and PT Students to Enhance Interprofessional Clinical Practice

Renee Brown, PT, PhD

Debra Gibbs, Ed.D, MHS, OTR/L, CAPS, FAOTA

LaRae Murray, OTD, OTR/L



# The Team

## Occupational Therapy

- LaRae Murray
- Debra Gibbs
- Missy Bryan
- Allison Koch
- Teresa Plummer
- Tamara Lemmonds
- Cindy Hickman
- Katy Schmidt

## Physical Therapy

- Renee Brown
- Suzanne Greenwalt
- Cathey Norton
- Tyler Miller
- Lydia Bradford
- Diana Harrison
- Lindsay Ison

# Additional Team Partners

- Faculty and students from the following disciplines
  - Nursing (graduate and undergraduate)
  - Pharmacy
  - Social Work
  - Public Health
  - Exercise Science
  - Law
  - Interior Design
  - Mental Health Counseling
  - Music Therapy
  - Medicine
  - Simulation Staff

# Interprofessional (IP) Collaborative Practice

## Collaborative Practice

“When multiple health workers from different professional backgrounds work together with patients, families, carers, and communities to deliver the highest quality of care”

(World Health Organization [WHO], 2010, p. 7)

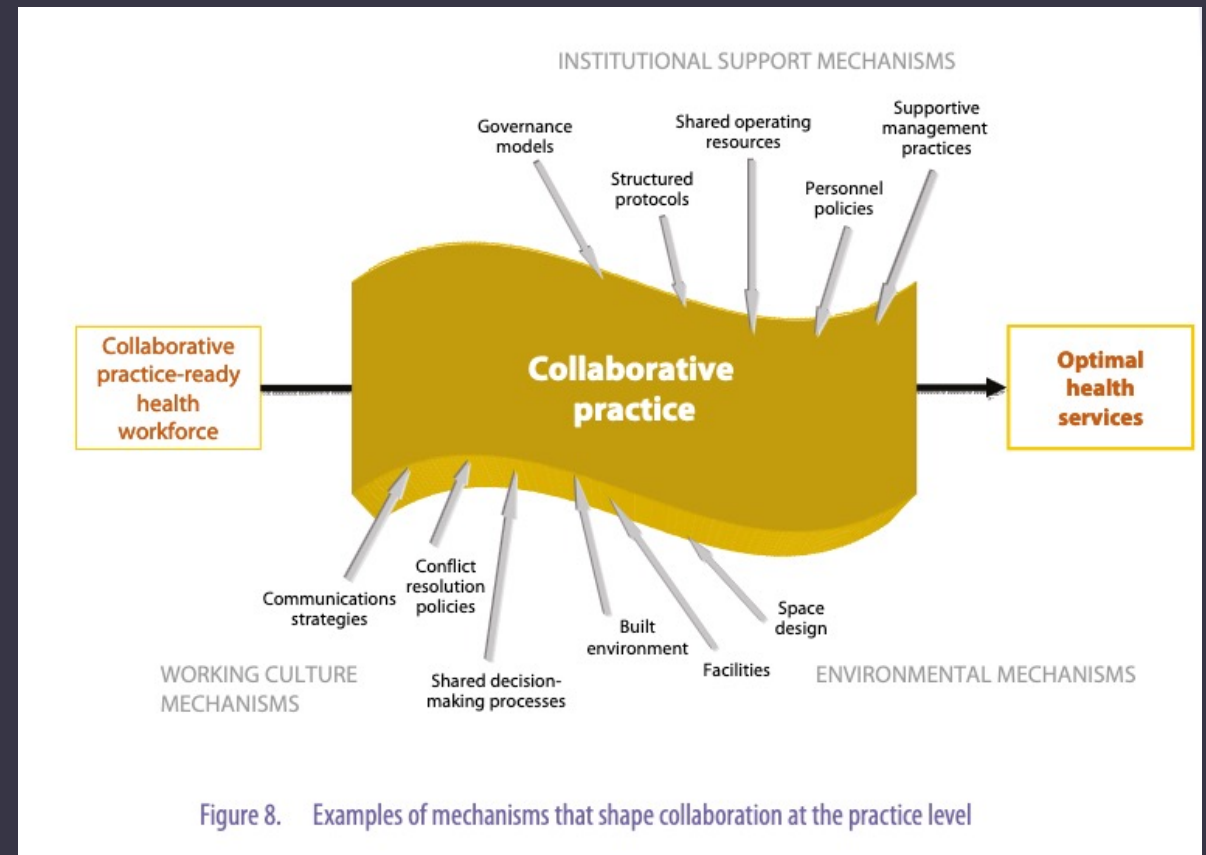
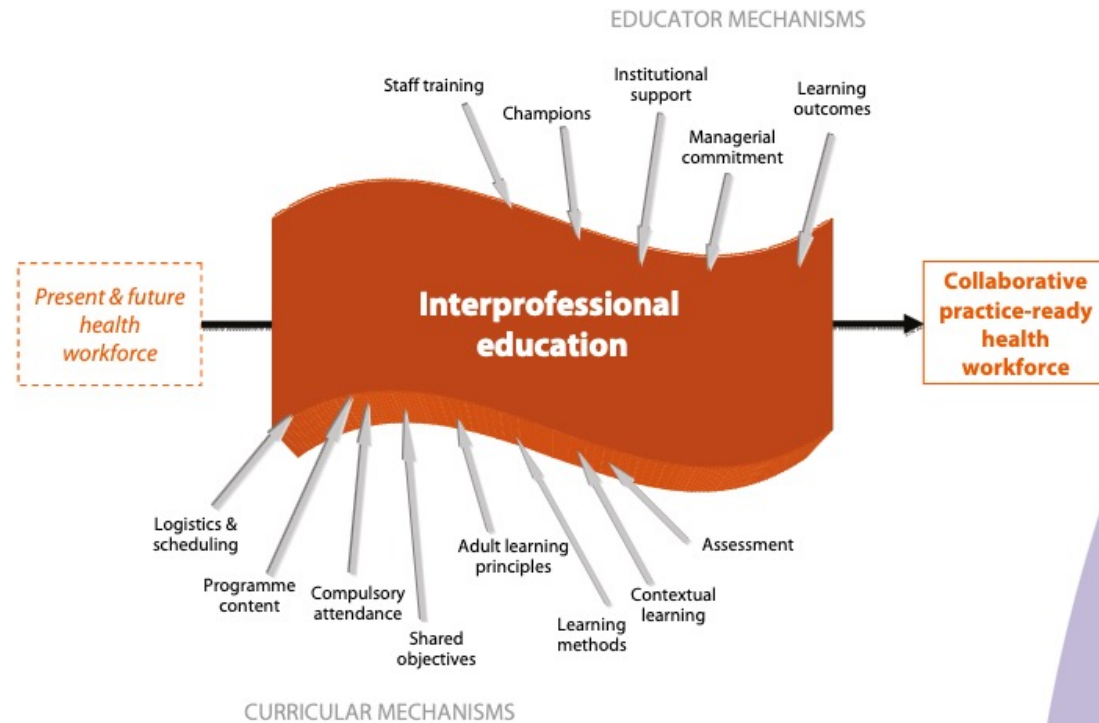


Figure 8. Examples of mechanisms that shape collaboration at the practice level

(WHO, 2010, p. 29)

# Interprofessional (IP) Education

Figure 7. Examples of mechanisms that shape interprofessional education at the practice level



(WHO, 2010, p. 23)

## Education

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

(WHO, 2010, p. 10)

# Importance of Interprofessional Practice



## IMPROVE

- Access to and coordination of health services
- Appropriate use of specialist clinical resources
- Health outcomes for those with chronic disease
- Pt care and safety



## DECREASE

- Total pt complications
- Hospital LOS
- Tension, conflict among caregivers
- Staff turnover
- Hospital admissions
- Clinical error rates
- Mortality rates

# 2016: Interprofessional Education Collaborative (IPEC) Competencies

(2016; [Link](#))

Roles and  
Responsibilities

Values and  
Ethics

Teams and  
Teamwork

Communication

# 2023 Draft/Revision: IPEC Competencies

(2023 draft; [Link](#))

## Roles and Responsibilities

Use knowledge of one's own role and team members' expertise to address health outcomes;  
5 sub-competencies

## Values and Ethics

Work with team members to maintain a climate of shared values, ethical conduct, and mutual respect;  
11 sub-competencies

## Teams and Teamwork

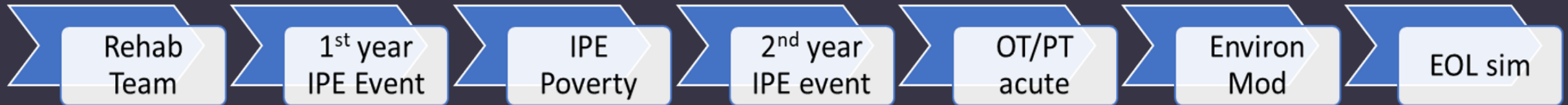
Apply values and principles of team science to adapt one's own role in a variety of team settings;  
10 sub-competencies

## Communication

Communicate in a responsive, responsible, respectful, and compassionate manner with team members;  
7 sub-competencies



# Belmont University IPE Experiences



# Rehab Team – Case Conference

## IPEC Competencies

Roles and Responsibilities  
Teams and Teamwork

## Disciplines

Students: 1st semester PT  
Faculty: PT, OT, SLP,  
Neuropsych, SW, MD, Pharm,  
*Music Therapy*

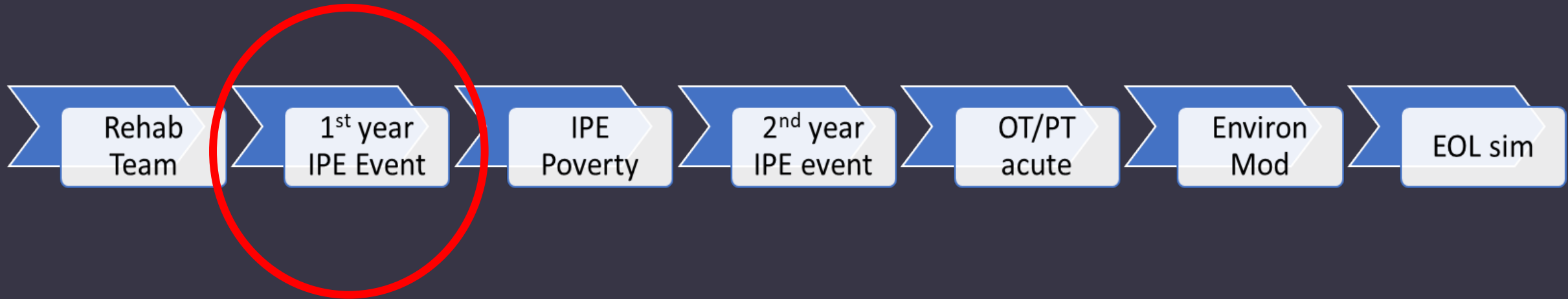
## Goals

Understand their own role  
Learn about other  
professional's role  
Reinforce each other's work  
to improve patient care

# Rehab Team – Case conference

- Case: Individual who has had a stroke
  - Complex problems
  - Requires multidisciplinary care
  - Focus
    - Who would be the primary discipline addressing each problem in the problem list?
    - How can we reinforce what each other is doing?
    - Who else might need to be on the team?

# Belmont IPE Experiences



# 1st Year IPE Event

## IPEC Competencies

Roles and Responsibilities  
Teams and Teamwork

## Disciplines

Students: PT, OT, Pharm Grad  
nursing (1st year grad students)  
Faculty: PT, OT, Pharm, Nursing,  
SW, MD

## Goals

Understand their own role  
Learn about other professional's  
role  
Teams and Teamwork

# 1st Year IPE Event

Interprofessional tables

Introductions

Icebreaker (Marshmallow challenge)

Introduction to case (post-operative)

Table discussion on case

Rehab panel



# 1st Year IPE Event - Outcomes

- Readiness for Interprofessional Learning Scale (RIPLS)
- Significant difference for all discipline between pre and post -test
- OT students had higher teamwork & collaboration scores than nursing & pharmacy
- Nursing students had lower scores on teamwork and collaboration and positive professional identity than OT and PT
- OT students had lower negative professional identity scores than nursing and lower score for "need to acquire more knowledge and skills than others"
- Take away: "Results of the current study suggest that an IPE program as short as two hours can positively affect student's attitudes about interprofessional learning, as well as their attitudes toward the roles and responsibilities of other healthcare professionals"

# Belmont IPE Experiences





# IPE Poverty Event

## IPEC Competencies

Roles and Responsibilities  
Teams and Teamwork  
Values and Ethics

## Disciplines

Students/Faculty: PT,  
OT, Pharm, Nursing, SW, PH,  
EXS, MHC  
Graduate and undergrad

## Goals

Teams and Teamwork  
Impact of social determinants  
of health on plan of care  
Considering the whole person

# IPE Poverty Event

Interprofessional groups

Small Group Introductions, role in case

Large group: Intro to PlaySpent virtual simulation

Small group: Complete the PlaySpent simulations as a group

Large group: Debrief

Small group: Revisit case, changes based on challenges encountered in simulation

Large group: Debrief



# IPE Poverty Event

## Qualitative Themes

- Outcomes:
  - Attitudes Toward Interprofessional Health Care Teams Survey
  - Significant difference pre and post indicating an increased agreement with the items

What I learned	Difference previous PlaySpent	Recommendations
<ul style="list-style-type: none"><li>• Teamwork</li><li>• Poverty</li><li>• Empathy</li><li>• Holistic, individualized approach to patient care</li></ul>	<ul style="list-style-type: none"><li>• Working as a group</li><li>• Challenging decision making</li><li>• Improved performance</li><li>• Changed approach through professional lens</li><li>• More empathy with case</li></ul>	<ul style="list-style-type: none"><li>• Shortening breakout</li><li>• Increasing large group debrief</li><li>• More feedback from faculty</li><li>• More clarity with instructions</li></ul>

# Belmont IPE Experiences



# 2nd Year IPE Event

## IPEC Competencies

Roles and Responsibilities  
Ethics and Values  
Communication

## Disciplines

Students/Faculty: PT, OT,  
Pharm, Grad nursing (2nd  
year grad students)

## Goals

Communication/discipline  
specific lingo  
Medical errors  
Responsibility for team  
communication

# 2nd Year IPE Event

Interprofessional groups

Small group: Introductions and ice breaker

Large group: Intro to communication and medical errors: Susan Sheridan Video

Small group: Discussion about the video

Large group: Debrief/Intro to case

Small group: Case-identify unfamiliar terminology, Identify the medical error and offer suggestions for preventing it from occurring

Large group: Debrief



Professionals  
Huddle Speak  
Network Talk Report  
Effective teamwork Dialog  
communication Write  
Connect Discuss  
Document

# 2nd Year IPE Event

## Qualitative Themes

### ○ Outcomes

- 96% Strongly agree/agree that objectives were met

#### What I liked

- Working with others, collaboration
- Engagement
- Guided questions
- Case was engaging

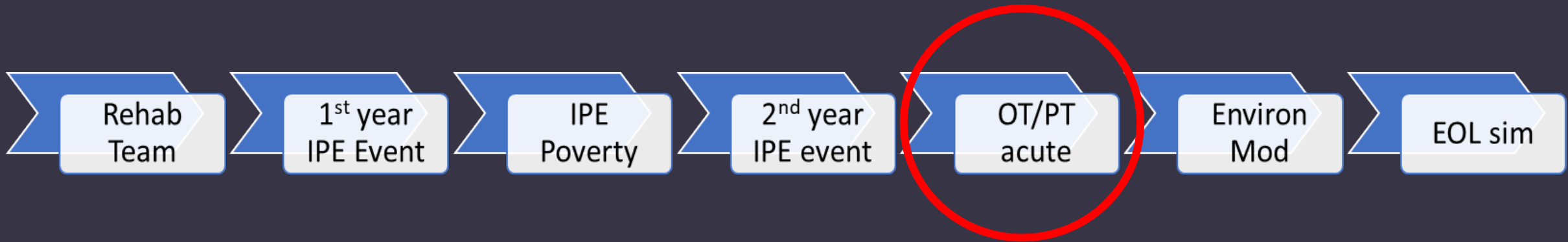
#### What I learned

- Communication
- Pharmacy/medications
- FNP
- Abbreviations

#### Suggestions

- Reading the case prior to event
- timing

# Belmont IPE Experiences





# OT/ PT Acute Care Simulation

## IPEC Competencies

Roles and Responsibilities  
Teams and Teamwork  
Communication

## Disciplines

Students: 1st year OT, 2nd year PT

## Goals

Communication  
Teamwork  
Manage lines and tubes  
Response to critical event

# OT/PT Acute Care Simulation

2-3 OT/PT students

Review chart and meet team

Pre-brief

Simulation – manage lines and tubes while getting patient to side of bed (Mannequin and SPs)

Change in vital signs

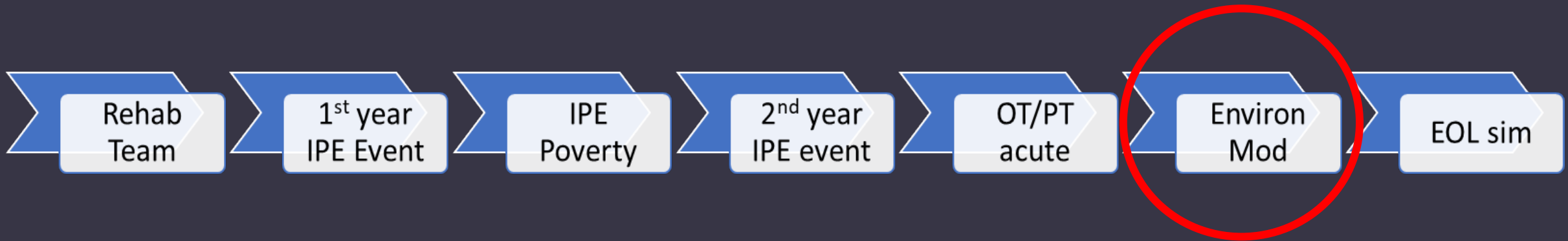
Manage patient and return safely to bed



# OT/PT Acute Care Simulation

- Mannequins vs standardized actors
  - Actors
    - Provided opportunity for improved patient communication
    - More realistic movement
    - Provide feedback in real time
    - Cost

# Belmont IPE Experiences



# Environmental Modifications

## IPEC Competencies

Roles and Responsibilities  
Teams and Teamwork  
Communication

## Disciplines

Students: 2nd year OT and  
PT, **undergraduate interior  
design**

## Goals

Communication  
Teamwork  
Accessibility/  
Environmental  
modifications

# Environmental Modifications

Introduction of professions

Simulated disability experience

Floor plan with a case

Small group develop recommendations

Large group report out



# Environmental Modifications

- 6 cases of individuals with disabilities
  - Variety of ages
  - Variety of motor, sensory, cognitive deficits
  - Varying mobility
- Floor plans
  - Apartment
  - Mobile homes
  - Single floor home
  - Multiple story home

# Environmental Modifications

## Student Feedback

### ○ Roles and responsibilities

- "Interior designer know a ton about home modifications for disabilities! Had no idea they did that as well!"
- "I learned that interior designers have a role in many more areas than I thought (not just what we see on HGTV)"
- "Interior designers don't just decorate."
- " More clear idea of OT work"
- "I learned the difference between OT & PT"
- "PTs know a lot about diagnoses"

### ○ Environmental Modifications options

- Flooring
- Appliances
- Lighting
- "Calm" aspects to put within the home

### ○ Collaboration

- "It was good to be able to collaborate and fill in knowledge I was not sure about."
- "Getting to know the other disciplines"
- "Working with other disciplines"
- "Working together as a team to better pts life"



# Belmont IPE Experiences



# End of Life Simulation

## IPEC Competencies

Roles and Responsibilities  
Teams and Teamwork  
Communication  
Values and Ethics

## Disciplines

Students: PT, OT, SW, Nur,  
**Law**

## Goals

Communication  
Conflict management  
Teamwork  
Self-regulation

# End of Life Simulation

Pre-brief

Simulation with SP for family members and significant others

PT/OT students think they are getting the patient to the side of bed

Patient has taken a turn for the worse

Conflict between the estranged mother and the patient's partner

Patient dies during simulation

Manage conflict between family member and sig. other

Debrief including law students for DNR



# End of Life Simulation – Qualitative Study Outcomes

- Varying views on their preparedness for an unexpected event
- Role clarity
- Greater appreciation for interprofessional team, acknowledging need for one another
- Using their self-awareness and self-regulation to manage their emotions in the moment, benefit from observing others during simulation and debrief

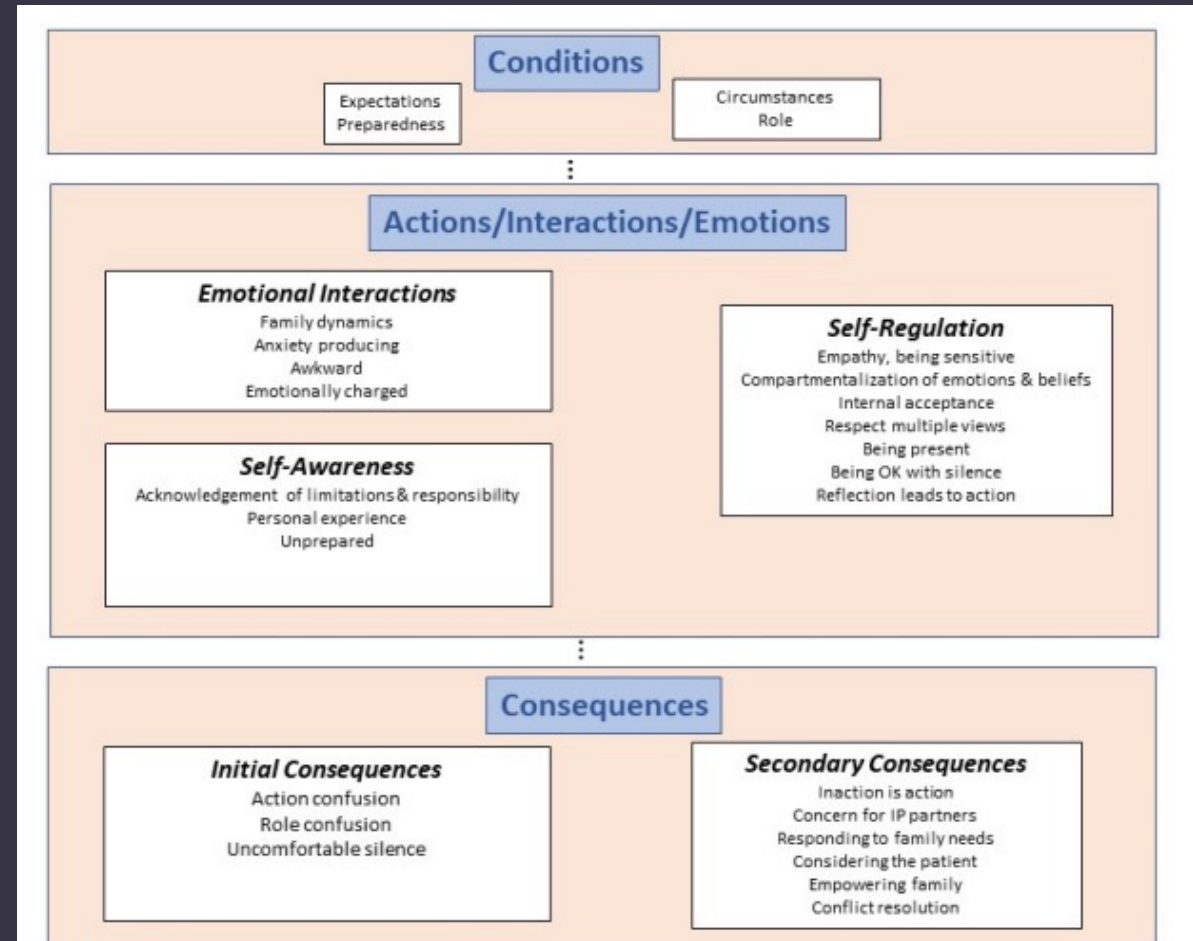


Figure 2. Self-Awareness, Self-Regulation, Simulation Scenario

# Other IPE Opportunities at Belmont

- Medical Service Trips
- Healthcare Theater Course
- Interprofessional Escape Room
- LEND (<https://vkc.vumc.org/vkc/lend> )
- MVA (<https://www.meharry-vanderbilt.org/> )
- TIPEC (<https://tipec.org/> )
- Nashville Interprofessional Collaborative

# Overview: Challenges & Opportunities

- Virtual vs in-person
- Translation from education to practice
- Composition of the teams, team size for activities
- Incorporating undergrad programs

# Virtual vs In-person

- Objectives were met in both formats
  - 98% participants strongly agreed/agreed objectives were met for **in-person event**
  - 97.6% participants strongly agreed/agreed objectives were met for **virtual event**
- Challenges
  - **In-person** - Size, space, noise
  - **Virtual** - Zoomed out, not taking it as seriously, less faculty interacting in small group discussion

## Common to both formats

Liked collaborating with each other

Learned about the other disciplines

Became familiar with other disciplines terminology

Understood the importance of communication and drug information

## Unique to Virtual

More meaningful discussion without the distraction of noise in a large space

Able to include more students, including our hybrid/ weekend programs

Easier for students who live off campus or have clinical that day

# Translation from Education to Practice

- Provides a framework for interprofessional interaction
- Provides practice interacting with other professions
- Exposure to different professions to understand value they bring to the patient
- Many different professions that we do not include (athletic trainers, PA, MD students, orthotics/prosthetics, etc.)
- Each clinical setting is different in their teams/teamwork and communication
- Translation from simulation experience to real clinical settings



# Composition of Teams & Team Size

- Increased number of students
  - Ideal team size 6-8 students
- Unequal program size so teams are not made up of equal number of students from each discipline
- Incorporating undergraduate students



# Challenges & Opportunities

- Unique partners
  - Biomedical engineers for Go Baby Go
  - Law, interior design, theater, music therapy, architecture, political science
- Co-curricular IP activities
  - Spirituality and Occupational Wellness presentations
  - Diversity
  - CHS Open House
- Opportunities for IP clinical experiences
- Research opportunities, scholarly publications & presentations



# Resources

- [Nexus website](#)
- [Interprofessional Education Collaborative \(IPEC\) website](#)
  - [Virtual poster fair](#)
- [IP Practice & Education Consortium website](#)
- [TN Guidance on Developing Quality Interprofessional Education for the Health Professions](#)
- [Tennessee Interprofessional Practice and Education Consortium](#)
- [ACAPT member Simulation Library](#)



# Small Group Discussions – IPE Ideas

- Faculty/Instructors:
  - What programs do you have that could be involved in IPE?
  - Reflect on the framework, intentionality of current IPE & its progression through curriculums
- Practitioners:
  - What team members could be involved in Collaborative Practice?
  - Reflect on the framework, intentionality of current Collaborative Practice
- All:
  - What is one action step you could take to improve IPE or Collaborative Practice where you work?
- *Also think "outside the box"*
- *Will report out*

# Small Group Discussions – IPE Ideas

- Faculty/Instructors:

- What programs do you have that could be involved in IPE?
- Reflect on the framework, intentionality of current IPE & its progression through curriculums



# Small Group Discussions – IPE Ideas

- Practitioners:
  - What team members could be involved in Collaborative Practice?
  - Reflect on the framework, intentionality of current Collaborative Practice



# Small Group Discussions – IPE Ideas

- All:
  - What is one action step you could take to improve IPE or Collaborative Practice where you work?



# References

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