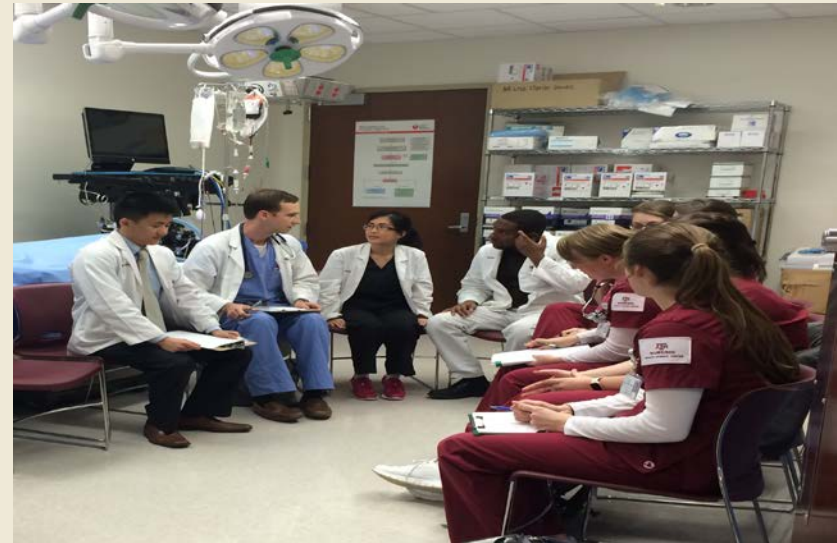


# The Effects of Interprofessional Pediatric End-of-Life Simulation on Communication and Role Understanding in Health Professions Students: A Pharmacy Perspective



Jacqueline Stout, PhD, RN, Alison Pittman, MSN, RN, CPN, Regina Bentley, EdD, RN, CNE, Jerry Livingston, BSN, MSN, PhD, Bree Watzak Pharm. D.

# *Conflict of Interest*



HEALTH SCIENCE CENTER  
TEXAS A&M UNIVERSITY

- We have no conflicts of interest to declare.

# *Learning Objectives*



- Describe the creation and conduction of a pediatric end-of-life simulation; employing technology to advance IPE
- Describe the TeamSTEPPS tools for evaluation of effective IPE and collaborative practice

## Accreditation Council for Pharmacy Education (ACPE)

### Standard 11 in the ACPE 2016 update

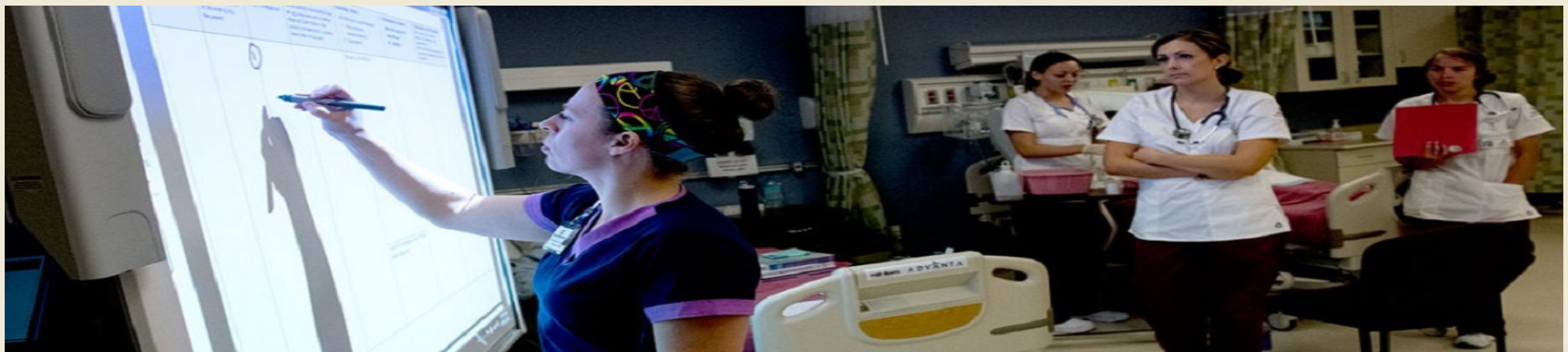
- 11.1 Interprofessional team dynamics
- 11.2 Interprofessional team education
- 11.3 Interprofessional team practice

Simulation can be used for all 3 elements

# *Background*



- Simulation allows healthcare professionals to work and learn side by side as they do in actual patient-care situations.
- Previous studies have confirmed the effectiveness of high-fidelity simulation in improving nursing students' and medical students' knowledge and communication skills (Alinier et al., 2006).



# Background



- Simulation has been deemed as an effective strategy for improving healthcare students' knowledge and communication. Although noticeable increases in interprofessional approaches to medicine have been documented, most studies demonstrate these effects in isolation (Tofil et al., 2014).



To analyze the impact of two interprofessional pediatric end-of life simulations on medical students, nursing students, pharmacy students, and public health students.

# *Specific Aims*



HEALTH SCIENCE CENTER  
TEXAS A & M UNIVERSITY

Aim 1: Analyze the effects of an interprofessional pediatric end-of-life simulation on nursing, medical, pharmacy, and public health student's perception of roles and responsibilities of health care professionals.

Aim 2: Analyze the effects of an interprofessional pediatric end-of-life simulation on interprofessional communication amongst nursing, medical, pharmacy, and public health students.

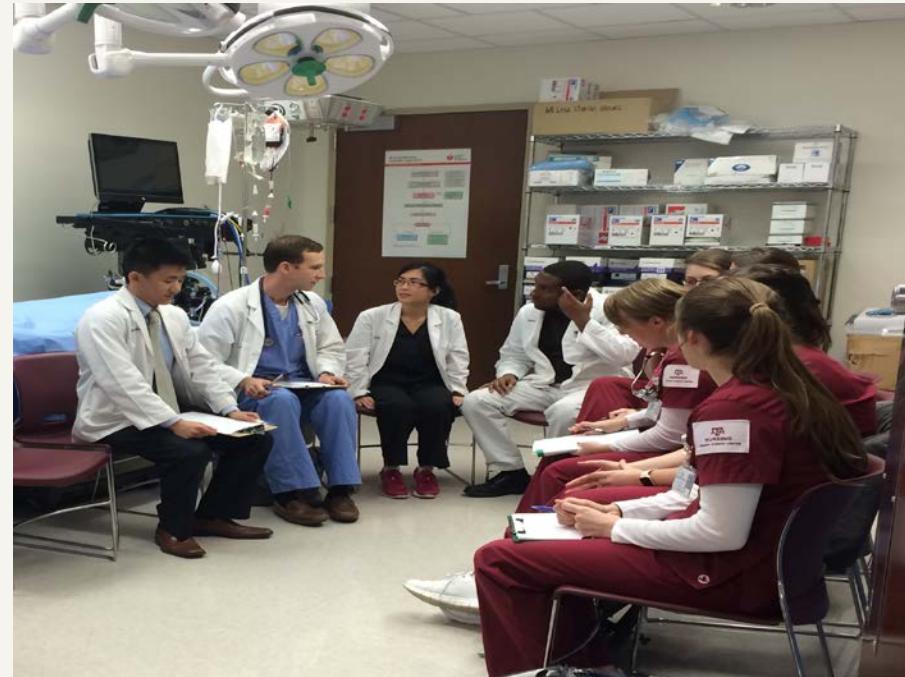


- Quasi experimental design
- Students were surveyed prior to the interprofessional pediatric end-of-life simulations
- The students participated in two separate simulations that included a prebrief and debrief for each simulation.
- Faculty completed an observation tool following each simulation.

# *High Fidelity Simulations*



# *Prebrief and Debrief*



- TeamSTEPPS® 2.0 Teamwork Attitudes Questionnaire (T-TAQ).
- TeamSTEPPS® 2.0 Teamwork Perceptions Questionnaire (T-TPQ).
- The TeamSTEPPS® 2.0 Team Performance Observation Tool.

## TeamSTEPPS® 2.0

Measurement

### TeamSTEPPS Teamwork Attitudes Questionnaire (T-TAQ)

- Level II Learning
- Found in Tab F
- 30-item self-report tool
- Respondents rate their agreement with items on a 5-point Likert scale
- Measures attitudes toward:
  - Team Structure
  - Leadership
  - Situation Monitoring
  - Mutual Support
  - Communication

[TeamSTEPPS Materials and Tools](#)

Team Strategies & Tools to Enhance Performance & Patient Safety

## TeamSTEPPS® 2.0

Measurement

### Team Performance Observation Tool

- Level II Learning and Level III Behavior
- Found in Tab F
- Tool for observing team performance
  - Site assessment
  - Measure training effectiveness
- Observers should practice using the tool
- Can be adapted to a particular unit

Team Strategies & Tools to Enhance Performance & Patient Safety

## TeamSTEPPS® 2.0

Measurement

### TeamSTEPPS Teamwork Perceptions Questionnaire (T-TPQ)

- Level II Learning and Level III Behavior
- Found in Tab F
- 35-item self-report tool
- Respondents rate their agreement with items on a 5-point Likert scale
- Measures staff perceptions of:
  - Team Structure
  - Leadership
  - Situation Monitoring
  - Mutual Support
  - Communication

[TeamSTEPPS Materials and Tools](#)

Team Strategies & Tools to Enhance Performance & Patient Safety

- N= 41 (Nursing=15, Medicine=5, Pharmacy=9, and Public Health=1).
- TeamSTEPPS T-TAQ analysis indicated a significant difference in the mean pre and post scores ( $p=0.015$ ).
- TeamSTEPPS T-TPQ analysis indicated a significant difference in the mean pre and post scores ( $p=0.028$ ).
- TeamSTEPPS Team Performance Observation Tool indicated a statistically significant increase in observation scores between SIM 1 and SIM 2 ( $p<0.001$ ,  $DF=18$ ,  $R=0.8$ ).

- Separate physical location of College of Pharmacy
- ACLS, pediatrics, TeamSTEPPS not areas addressed in current curriculum
- Locked in didactic schedule = unexcused absence when participating in simulation
- Fear of the unknown and failure

- Request for ACLS training
- TeamSTEPPS mastertraining and incorporation into P1 communication class
- Ready formed teams at Disaster Day
- Student driven IPE momentum
- Increased flexibility in excused absences for IPE efforts

# *Conclusions*



- Interprofessional pediatric end-of-life simulations were significantly related to an increase in faculty observation scores, T-TAQ pre/post scores, and T-TPQ pre/post scores.
- The improvement in attitudes toward interprofessional teamwork and role clarity will also transition into practice.
- Students will have a better understanding of the importance of collaboration in order to assure quality patient care.