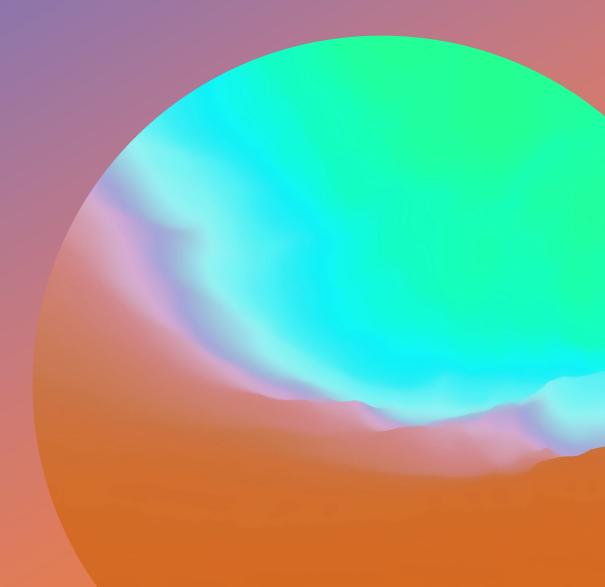
Developing IPE Utilizing Current Simulation Approaches

+

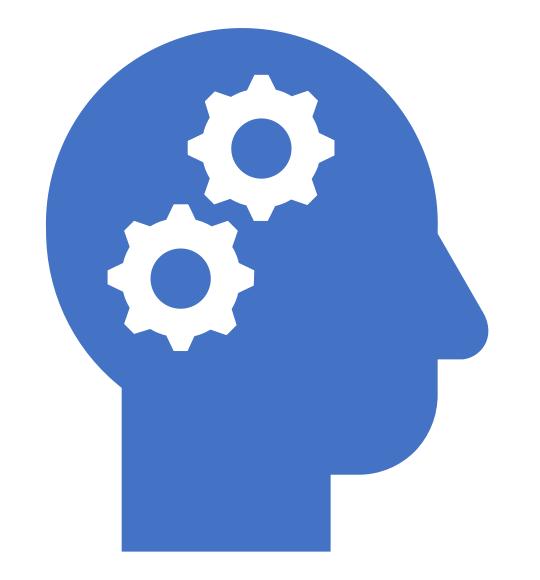
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Brian G. Mann EdD, MS, PA-CChief of Simulation OperationsPhiladelphia College of Osteopathic Medicine



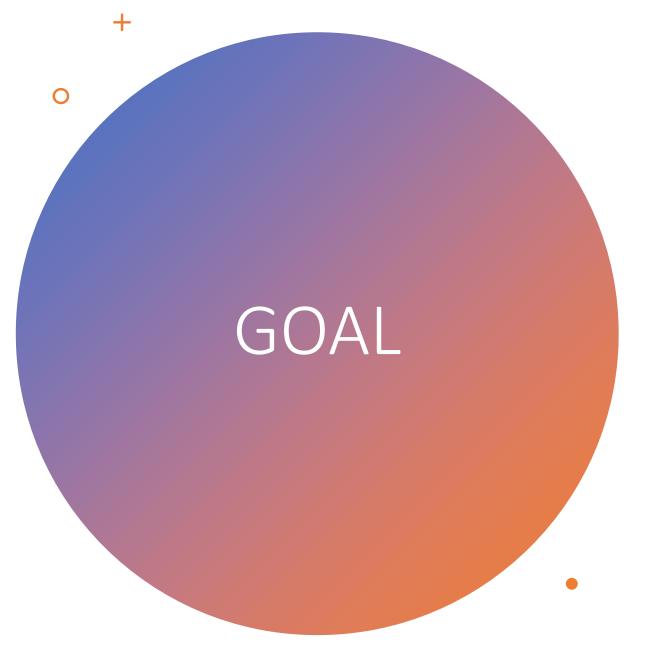
Question 1

Recall a time in your life when you were very excited about learning.



What was it about that time that made learning so exciting?





• The audience gains a new or different perspective on how simulation can be used to develop interprofessional education (IPE) opportunities.

Objectives



Define key terminology used in simulation according to industry standards.



Describe a process used when requesting a simulation activity.



Describe the difference between objective structured clinical examination (OSCE) and high-fidelity simulation.

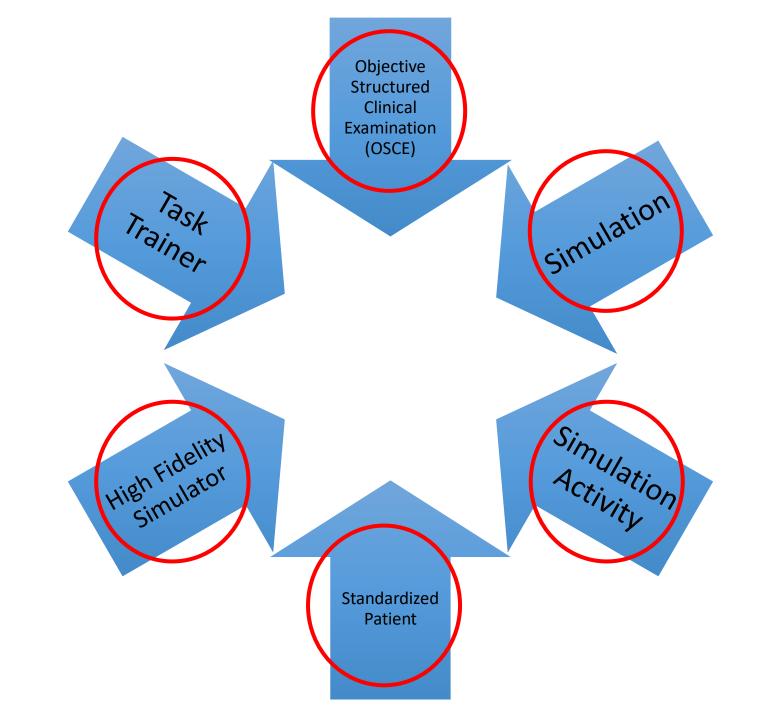


Provide an example of one learning theory used in medical simulation.



Common Scenario

Terminology

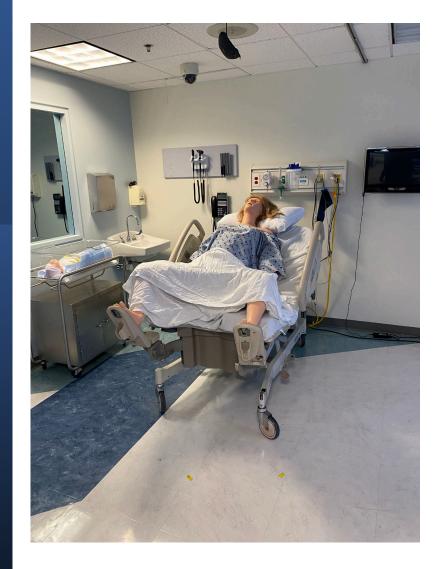




Simulation Settings



Settings continued...



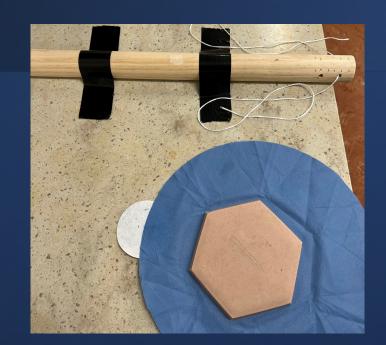


Settings continued...



Task Trainers



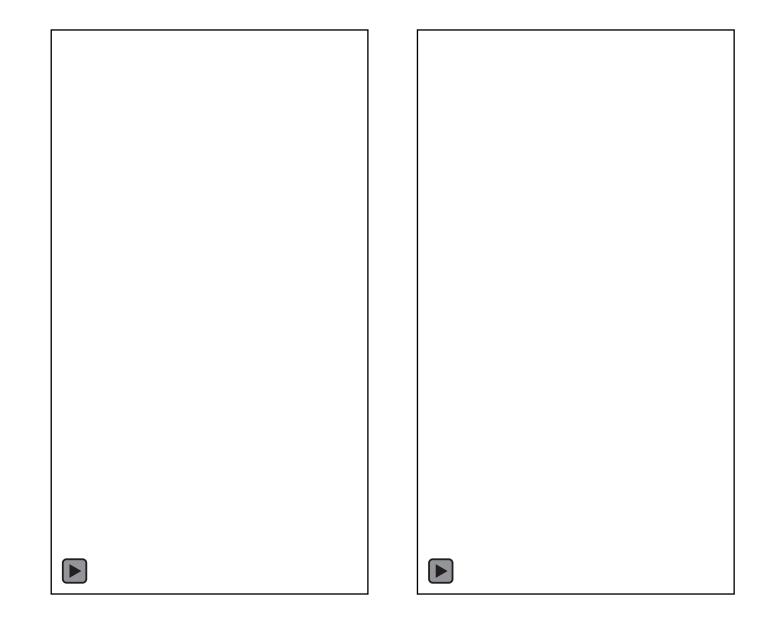


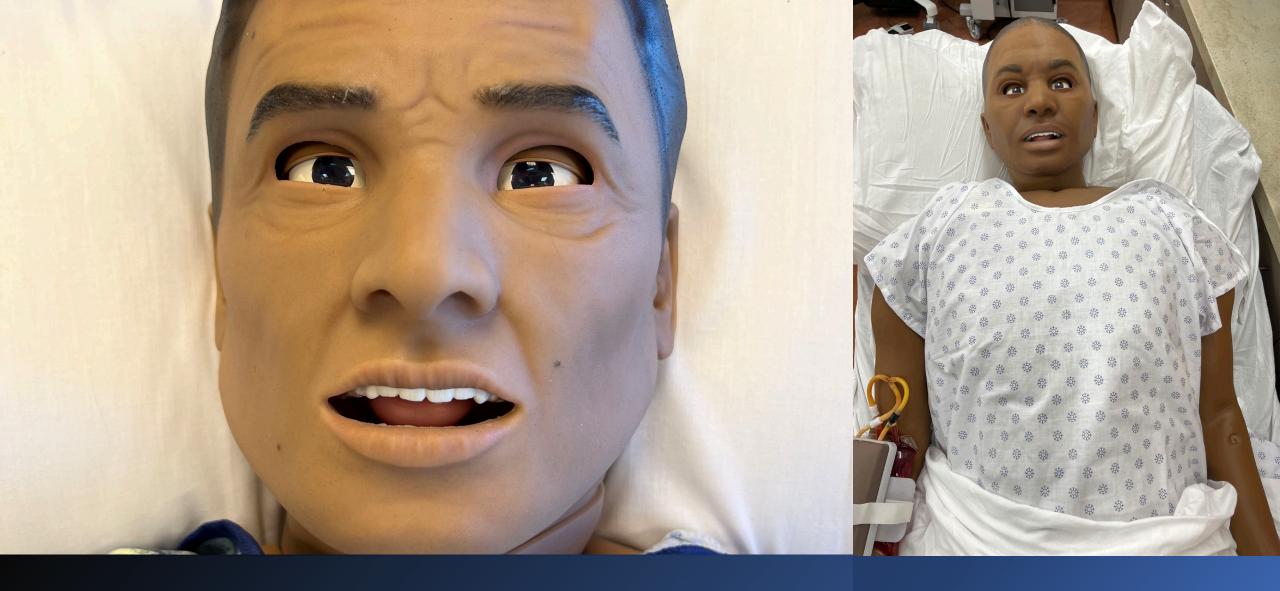


High-Fidelity Simulators



High-Fidelity Simulators





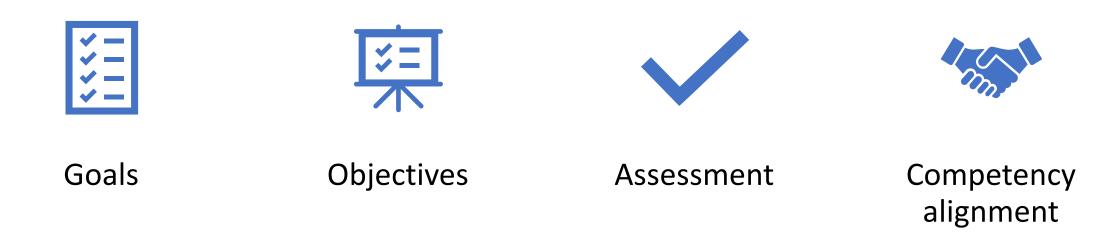
Diversity

Up to this Point

- Reviewed Key Simulation Terms
 - Objective Structured Clinical Examination (OSCE)
 - Simulation
 - Simulation Activity
 - Standardized Patient
 - High Fidelity Simulator
 - Task Trainer

- Discussed the differences
 - OSCE
 - High-Fidelity Simulations
 - Settings
 - Equipment

Process used when requesting a SIM Activity



IPEC Competencies

Values and Ethics

Roles and Responsibilities

Interprofessional Communication

Teams and Teamwork

Canadian

- Role Clarification
- Patient/Client/Family/Community-Centered Care
- Team Functioning
- Collaborative Leadership
- Interprofessional Communication
- Interprofessional Conflict Resolution

So, lets go back to your answers from earlier!



• What was it about that time you felt you were so excited about learning?

Educational Theory

- Kolb's Experiential Learning Theory
 - Concrete Experience
 - Reflective Observation
 - Abstract Conceptualization
 - Active Experimentation

How can simulation be used to develop interprofessional education (IPE) activities?

It is really up to your imagination!

- OB/GYN
- Internal Medicine
- Family Medicine
- Surgery
- Critical Care
- Hospitalist
- Emergency
- Pediatrics
- Neonatology
- Psych
- Pharmacy
- Telehealth

- Physician
- Physician Assistant
- Nursing
- Emergency Medical Services
- Pharmacy
- Physical Therapy
- Occupational Therapy
- Social Work
- Case Management
- Psychology
- Counseling
- Education
- Law Enforcement

Most Effective

Ensure simulation is integrated into the curriculum

Conclusion...OBJECTIVES

01

Define key terminology used in simulation according to industry standards.

02

Describe a process used when requesting a simulation activity.

03

Describe the difference between objective structured clinical examination (OSCE) and high-fidelity simulation. 04

Provide an example of one learning theory used in medical simulation.

Conclusion Cont...GOAL

 The audience gains a new or different perspective on how simulation can be used to develop interprofessional education (IPE) opportunities



Reference Articles

- Passiment M, Sacks H, Huang G. Medical Simulation in Medical Education: Results of an AAMC Survey. Association of American Medical Colleges. September 2011. Accessed February 22, 2021. <u>https://www.aamc.org/system/files/c/2/259760-</u> medicalsimulationinmedicaleducationanaamcsurvey.pdf
- Nuzhat A, Salem RO, Al Shehri F N, Al Hamdan N. Role and challenges of simulation in undergraduate curriculum. *Med Teach*. 2014;36(Suppl 1):S69– 73. doi:10.3109/0142159X.2014.886017
- Olson J, Rinehart J, Spiegel JJ, Al-Nakkash L. Student perception on the integration of simulation experiences into human physiology curricula. Adv Physiol Educ. 2019;43(3):332–338. doi:10.1152/advan.00202.2018
- Walshe NC, Crowley CM, O'Brien S, Browne JP, Hegarty JM. Educational interventions to enhance situation awareness: a systematic review and meta-analysis. *Simul Healthc*. 2019;14(6):398–408. doi:10.1097/SIH.00000000000376
- Stocker M, Burmester M, Allen M. Optimisation of simulated team training through the application of learning theories: a debate for a conceptual framework. *BMC Med Educ*. 2014;14(1):69. doi:10.1186/1472-6920-14-69
- Lioce L, ed. *Healthcare Simulation Dictionary.* 2nd ed. Agency for Healthcare Research and Quality; 2020. doi:10.23970/simulationv2
- Osteopathic Considerations for Core Entrustable Professional Activities (EPAs) for Entering Residency. American Association of Colleges of Osteopathic Medicine. April 2016. Accessed February 22, 2021. https://www.aacom.org/docs/default-source/med-ed-presentations/coreepas.pdf?sfvrsn=10

- Beal MD, Kinnear J, Anderson CR, Martin TD, Wamboldt R, Hooper L. The effectiveness of medical simulation in teaching medical students critical care medicine: a systematic review and meta-analysis. *Simul Healthc*. 2017;12(2):104–116. doi:10.1097/SIH.00000000000189
- Levinson M, Kelly D, Zahariou K, Johnson M, Jackman C, Mackenzie S. Description and student self-evaluation of a pilot integrated small group learning and simulation programme for medical students in the first clinical year. Intern Med J. 2017;47(2):211–216. doi:10.1111/imj.13332
- Kwan B, Bui G, Jain P, Shah N, Juang D. Exploring simulation in the internal medicine clerkship. *Clin Teach*. 2017;14(5):349–354. doi:10.1111/tct.12577
- Thompson LR, Leung CG, Green B, et al. Development of an assessment for entrustable professional activity (EPA) 10: emergent patient management. West J Emerg Med. 2017;18(1):35–42. doi:10.5811/westjem.2016.10.31479
- Fouad AEA, Zakaria OM, Odeh AM, Refaie SM. Implementing medical simulation in undergraduate teaching of toxicology. *J Punjab Acad Forensic Med Toxicol*. 2018;18(2):58–66. doi:10.5958/0974-083X.2018.00034.1
- Yang CW, Ku SC, Ma MHM, Chu TS, Chang SC. Application of high-fidelity simulation in critical care residency training as an effective learning, assessment, and prediction tool for clinical performance. *J Formos Med Assoc.* 2019;118(9):1347–1355. doi:10.1016/j.jfma.2018.12.003
- James M. Lang. Small Teaching : Everyday Lessons From the Science of Learning 2nd edition. Jossey-Bass; 2021.
- Core competencies for interprofessional collaborative practice 2016 update. Interprofessional Education Collaborative. 2016. Accessed December 22, 2021. <u>https://ipec.memberclicks.net/assets/2016-Update.pdf</u>

Please feel free to reach out any time! <u>brianma1@pcom.edu</u>

Questions?

