Virtual Physical Therapy Simulations: How to Facilitate and Evaluate Debrief Sessions

Emily Gherghel, PT, DPT, CCI Wendy Brzozowski, BS, COTA/L 2:30 - 3:30pm

When the COVID-19 pandemic began in 2020, many physical therapy programs sought innovative teaching methods through remote learning, including virtual simulation of patient interactions. As educators implemented virtual simulation to solve issues such as a lack of clinical placement sites, it became apparent that virtual learning experiences may fill a critical gap in physical therapy education. Research supports the success of simulation across content areas; however, for continued success, instructors must understand and follow simulation best practices using three steps: prebrief, feedback, and debrief. Prebriefing readies students to engage with patients, while feedback during the simulation provides guidance and encouragement. Debriefing is particularly critical: research frequently documents that the bulk of student learning occurs within the debriefing process. With the three steps in mind, instructor and student debriefing checklists were developed and applied using Tanner's Model of Clinical Judgment to assess knowledge and participation for physical therapy students as well as speech-language pathology and occupational therapy students. This course will review the three steps to simulation implementation as well as debriefing checklists and debrief evaluative strategies.

Learners will be able to list the three steps of supervision for a simulation-based learning experience.

Learners will be able to interpret debrief checklist scores as they relate to student engagement and understanding.

Learners will be able to list three required elements for a successful virtual debriefing session.

1. Dumas, H. M., & Golub-Victor, A. C. (2022). An experiential learning activity using an online judgmentbased pediatric functional measure during hybrid instruction with doctor of physical therapy students. Journal of Physical Therapy Education, 36(1), 87-93. https://doi.org/10.1097/jte.00000000000214

2. Judd, B., Fethney, J., Alison, J., Waters, D., & Gordon, C. (2018). Performance in simulation is associated with clinical practice performance in physical therapist students. Journal of Physical Therapy Education, 32(1), 94-99. https://doi.org/10.1097/jte.00000000000024

3. Kononowicz, A. A., Woodham, L. A., Edelbring, S., Stathakarou, N., Davies, D., Saxena, N., Tudor Car, L., Carlstedt-Duke, J., Car, J., & Zary, N. (2019). Virtual patient simulations in health professions education: Systematic review and meta-analysis by the digital health education collaboration. Journal of Medical Internet Research, 21(7), e14676. https://doi.org/10.2196/14676

4. Palominos, E., Levett-Jones, T., Power, T., & Martinez-Maldonado, R. (2019). Healthcare students' perceptions and experiences of making errors in simulation: An integrative review. Nurse Education Today, 77, 32-39. https://doi.org/10.1016/j.nedt.2019.02.013

5. Silberman, N., Litwin, B., Fernandez-Fernandez, A., Dornbaum, M., & Ng, G. (2020). Development and evaluation of a simulation-based acute care course in a physical therapist education program. Journal of Physical Therapy Education, 34(1), 76-85. <u>https://doi.org/10.1097/jte.00000000000122</u>"

Emily Gherghel currently serves as the Lead Physical Therapy Learning and Simulation Developer at Simucase. She is a physical therapist with experience in various rehabilitation settings after having practiced across the country. She is an APTA member, NYPTA, and Education Section member. She earned both a bachelor's in English and a Doctor of Physical Therapy degree from Misericordia University. She has authored research published in the Journal of Pediatric Rehabilitation Medicine and is certified in the modified New Zealand Otago Exercise Program for the prevention of falls by the Carolina Geriatric Education Center. Additionally, she is a Certified Clinical Instructor.

Wendy Brzozowski is a Certified Occupational Therapy Assistant with a BS in Business Management and Healthcare Administration. Currently, she is the OT and PT Sales Manager for Simucase and provides support to students and faculty, as well as assists in the development of simulations. Ms. Brzozowski has been a COTA for 20 years, with a background in skilled nursing, outpatient, Hospice, rehab management, and as a clinical instructor in an OTA program. Maura Lavelle, MS, OTR/L, CHSEMaura Lavelle has worked in rehabilitative medicine, cutting-edge technologies, simulation, and clinical trials for neurological populations. She is a Certified Healthcare Simulation Educator and a peer reviewer for various professional OT journals. Currently, she is the Manager of Learning and Simulation Development at Simucase where she designs and develops computer-based simulation content. Maura earned a master's degree in occupational therapy from Columbia University and a bachelor's degree in human development from Cornell University.