

Facilitating Acute Care Competencies & Confidence in Physical Therapy Doctoral Students: Outcomes of a CITG Project

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Objectives

1. Discover simulation (SIM) learning terminology and purposes
2. Review current literature on how SIM learning impacts readiness for clinical education and future clinical practice
3. Understand typical SIM components and flow
4. Observe SIM learning with DPT students
5. Explore outcomes of SIM learning on CUW DPT student performance and acute care confidence

Thank You!

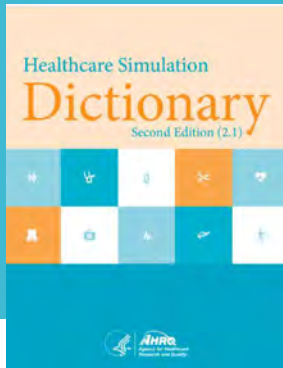
Concordia Intramural Teaching Grant
&
CUW PT Department
for
Simulation Instructor Development Training
Mayo Clinic, Rochester, MN
September 2022
&
Additional iPads for SIMVS Monitor System

CUW IT & AV Department
for
countless hours of technical work and piloting
with our SIM Lab equipment and SIMVS system

Is
this
SIM
Training
?



Definitions



- **Simulation:** a technique that creates a situation or environment to allow persons to experience a representation of a real event for the purpose of practice, learning, evaluation, testing, or to gain understanding of systems or human actions
- **Simulation-Based Learning Experiences:** an array of structured activities that represent actual or potential situations in education and practice. These activities allow participants to develop or enhance their knowledge, skills and attitudes or to analyze and respond to realistic situations in a simulated environment.

Healthcare Simulation Dictionary
<https://www.ssih.org/dictionary>

Purpose & Realism of SIM Experiences

- **Purpose:** practice critical physical therapy and interpersonal skills in a controlled safe environment
- **Realism of SIM comes through Fidelity**
 - Physical / Environmental
 - Conceptual
 - Emotional / Experiential



Healthcare Simulation Dictionary
<https://www.ssih.org/dictionary>

What impact do SIM experiences have on DPT students?

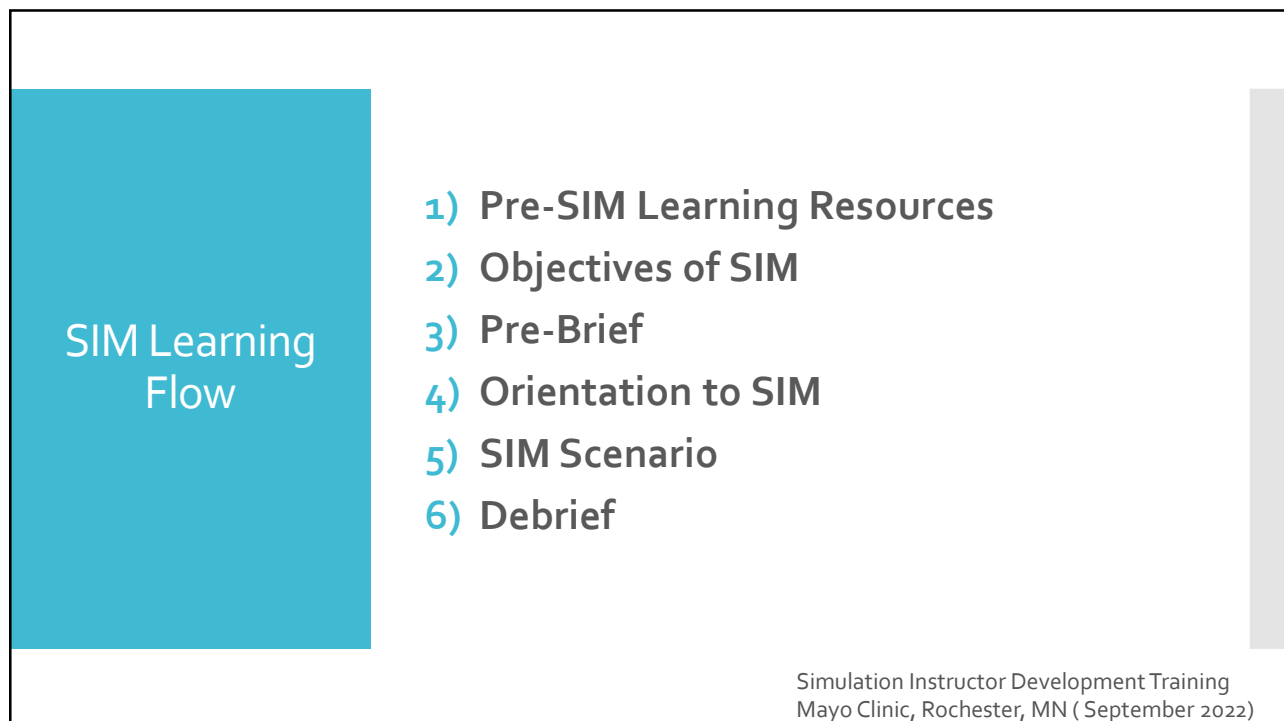
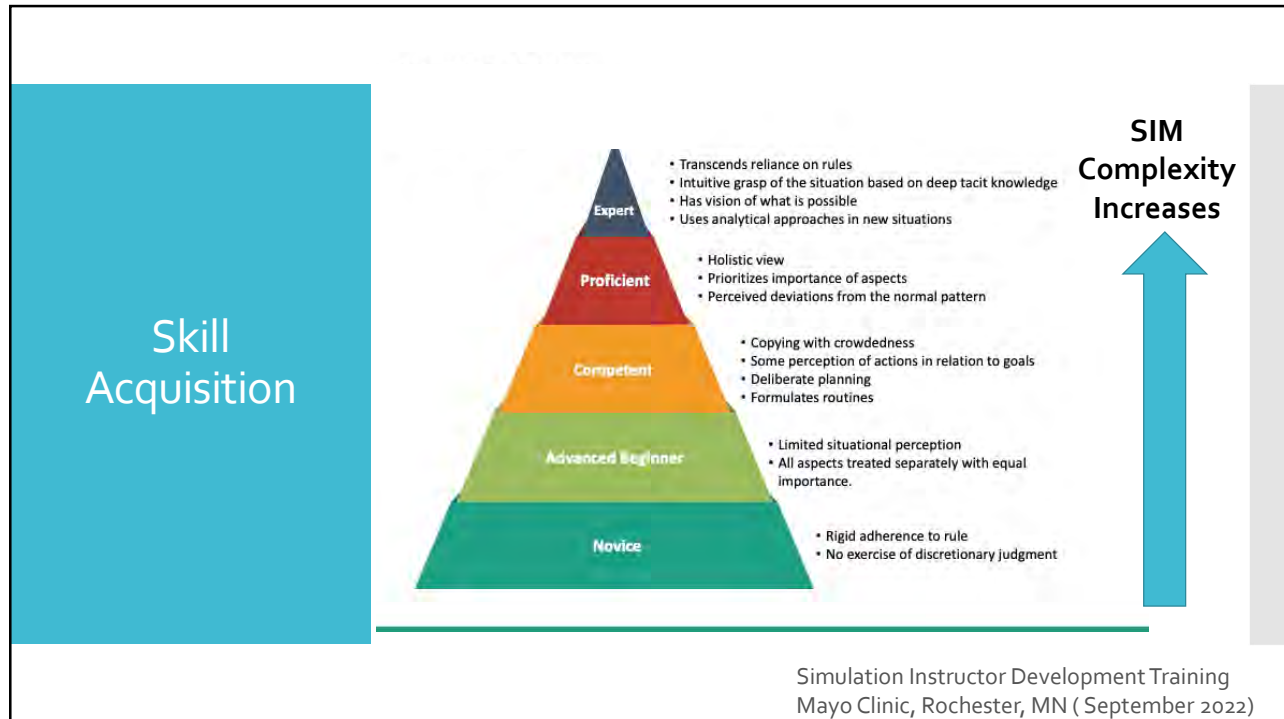
- High-fidelity acute care simulations positively impacted perceived readiness for clinical education, but not excitement about acute care clinical education. (Nithman 2016)
- One session of high fidelity human simulation as a laboratory activity may have a substantial impact on students' perceptions and confidence prior to entering an acute care clinical experience. (Shoemaker 2009)
- High-fidelity simulation is a positively perceived, experiential learning strategy capable of building essential interprofessional skills and enhancing OT and PT students' attitudes and beliefs toward interprofessional collaborative practice in the acute care setting. (Coppola 2019)
- High-fidelity human simulation in physical therapy education leads to increased self-efficacy for acute care clinical practice and better preparation for acute care clinical practice. (Silberman 2015)
- High-fidelity human simulation in PT education may lead to improved performance during acute care clinical education. (Silberman 2016)

Why SIM Learning?

- Stepwise progression from didactic material to clinical application
- Integration of knowledge, skills and attitudes
- Active multi-tasking
- Increased exposure to acute care content with lines and monitors
- Practice, practice, practice in a safe environment where it is okay to make mistakes and learn from them

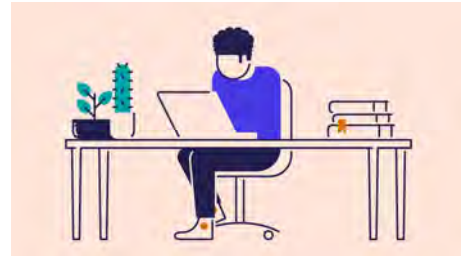


Nithman 2016 / Shoemaker 2009 / Coppola 2019 / Silberman 2015 & 2016



Pre-SIM Learning Resources

- Resources
 - Textbooks
 - Research Articles
 - Online Lectures
 - Others
- Come Prepared
 - Participant
 - Observer



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Learning Objectives

- May / May Not be revealed before SIM activity
- Broad Goals
- Specific Goals
- Domains
 - Cognitive
 - Psychomotor
 - Affective



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Pre-Brief



Video & Photography Consent
Sets the Stage
Creates Psychological Safety
Supports Intellectual Bravery
Relays Clarifications of Expectations
Creates a Level of Confidentiality
Time Outs

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Orientation to SIM



Participant Roles
SIM Space, Equipment & Individuals
Observer Roles

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SIM Scenario



"Scenario Start"

How many different paths?



"Scenario Complete"

SIM Scenario: COPD Exacerbation

Debrief Activities

Reflection Time for Participants and Observers

- **Reaction:**
 - What emotions or feelings did you have in the SIM?
- **Description:**
 - What occurred during the SIM?
- **Analysis with Review of Objectives:**
 - What were scenario objectives?
 - What went well? Why?
 - What did not go well? Why?
 - What opportunities exist for future?
- **Summary:**
 - SIM Experience Summary
 - Lessons Learned in the SIM
 - Clinical Application
 - Takeaways
- **Additional Debriefing as Needed**



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SIM Learning Conclusions

- **Acute-care SIM learning**
 - did not change DPT student knowledge or hands-on performance
 - increased acute care confidence with higher acute care confidence linked to better student satisfaction and self-confidence in learning
- **DPT students who completed an acute care clinical**
 - continued to increase acute care confidence in all areas except manual skills
- ***DPT educators should implement acute-care SIM learning within DPT curriculum to increase acute care confidence of students for their future clinicals and professional careers.***

Thank You!

Concordia Intramural Teaching Grant

CUW PT Department

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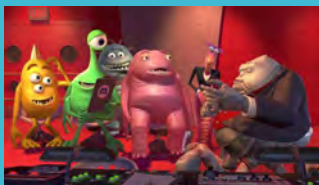
Dr. Kate Bennett

Dr. Michael McKinnis

Patient Actors

CUW DPT Students in Spring 2023 DPT 723 Course

References



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Questions?