



Best Practices In Clinical Skills Assessment

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Agenda

- Provide an overview of the state of simulation science and the assessment of clinical skills in health professions education.
- Discuss the future state of simulation science in health professions education.
- Discuss the importance of rater training and instrument selection for evaluation.

Pioneers



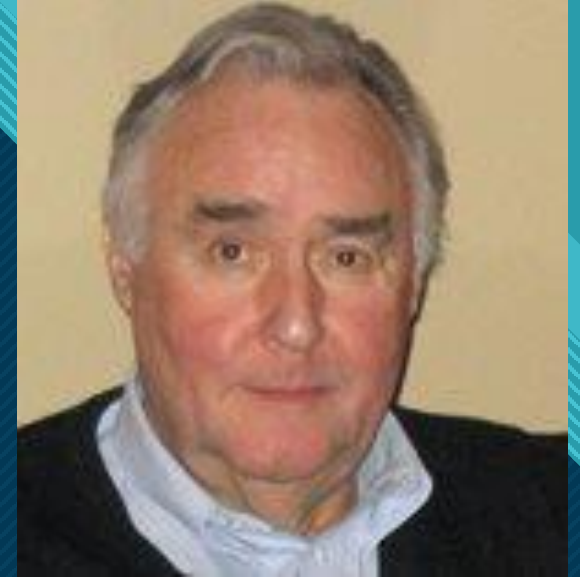
Howard Barrows
**Programmed/
Simulated Patients**



Paula Stillman
**The Arizona Clinical
Interview Rating Scale
(ACIRS)**



Ronald Harden
**Objective Structured
Clinical Examination
(OSCE)**



Ian Hart

Healthcare simulation is a range of activities that share a broad, similar purpose – to improve the safety, effectiveness, and efficiency of healthcare services.



Wiley Online



Laerdal Medical



Sciencenode.com



usmle.org

Educating
and training healthcare
professionals to be
more effective and
safe caregivers



Advantages of Patient Simulation in Clinical Skills Education

- Learner-centered approach to education, building on previous knowledge and experiences
- Active and interactive learning without risk to an actual patient which makes for safer encounters for patients and trainees
- Learners witness the results of their actions in real time
- Immediate feedback is provided (SPs and Faculty), and students can repeat skills until proficient



Telemedicine

“Telemedicine offers opportunities in a variety of specialties that can augment student education during this time. The projected growth of telemedicine necessitates that students learn new skills to be effective providers.” (Iancu, et al 2020)



Hybrid Encounters

Hybrid scenarios require the use of both standardized patients with high-fidelity mannequins or simulators.



Virtual Reality

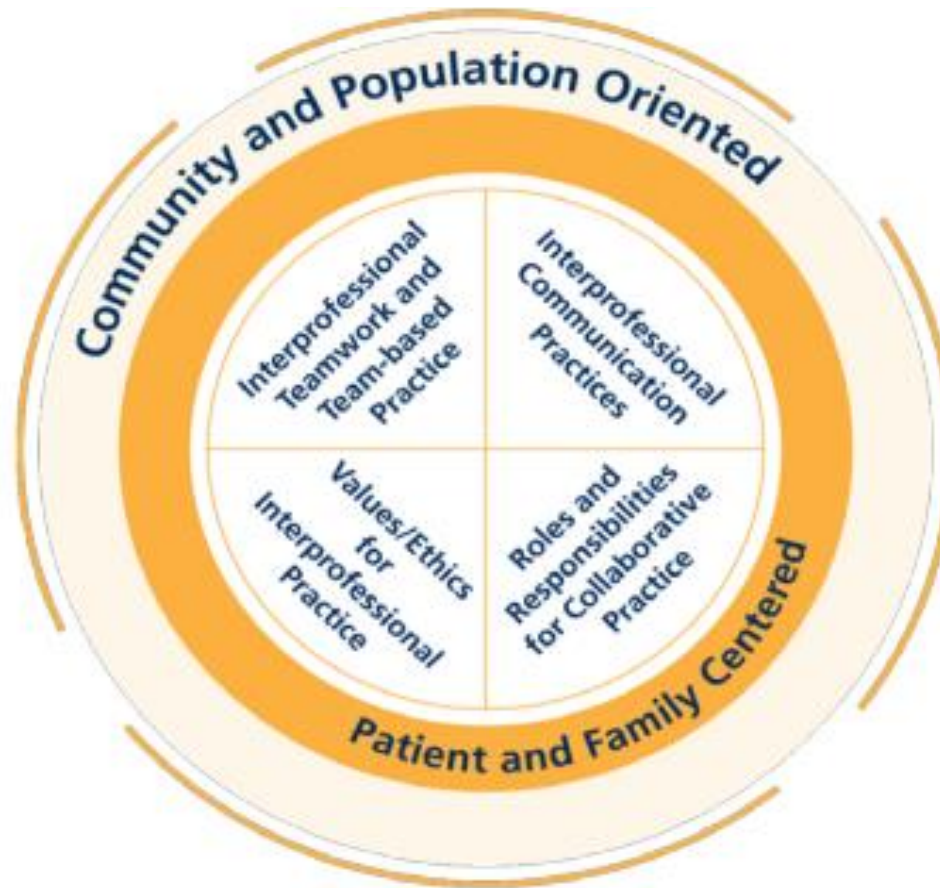


...an interactive internet-based approach to providing clinical education in a safe, nonthreatening environment that offers increased access and flexibility to the learner.

(Dutile, et al 2010)

Interprofessional Education

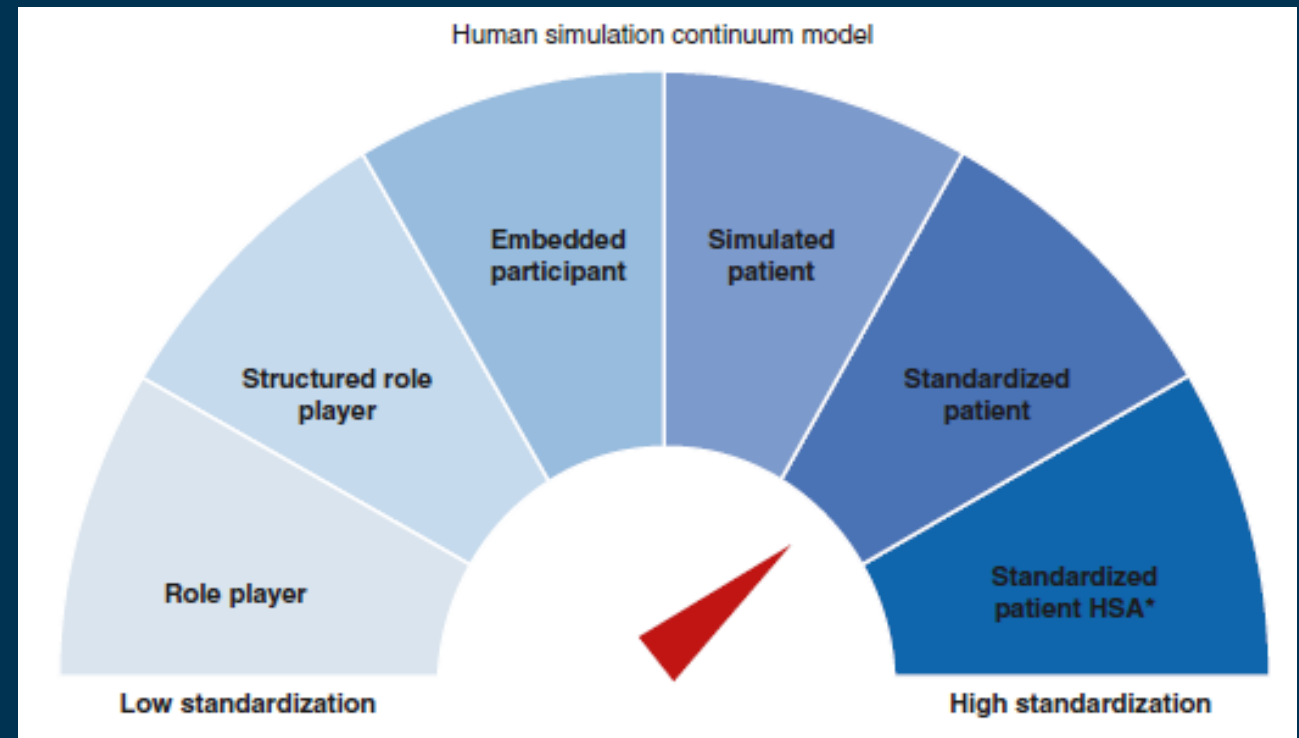
Interprofessional Collaboration Competency Domain



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The Learning Continuum pre-licensure through practice trajectory

Standardized Patients

- Individuals trained to portray a patient with a specific condition in a realistic, standardized and repeatable way
- Used for teaching and assessment of learners
 - History/Consultation
 - Physical Examination
 - Communication Skills
 - Documentation



(Gliva & Furman 2020)

Objective Structured Clinical Exams (OSCEs)



- Learners rotate through a series of timed stations
- Each station presents a specific clinical scenario
- Each station assesses one or more areas of clinical competence (for example, history taking, communication, physical examination skills, etc.)
- All students are exposed to the same clinical problems
- The assessment applies a standardized approach, which includes standardized patients (SPs), standardized scoring tools, and standardized exam-day logistics

Objective of the Assessment

- What is the purpose of this assessment?
- How will students demonstrate achievement?
- Variety of patient characteristics and representative conditions
 - Age (e.g., pediatric, adult)
 - Gender
 - Site of care (e.g., clinic, emergency department)
 - Organ System
 - Presenting complaint
 - Examinee level (e.g., end of course, end of year)

SP Training

- Ten step process including:
 - Portrayal of the patient
 - Accurate completion of the rating scale
 - Standardized portrayal
 - Roleplays
 - Teaching physical exam



Case Development Process

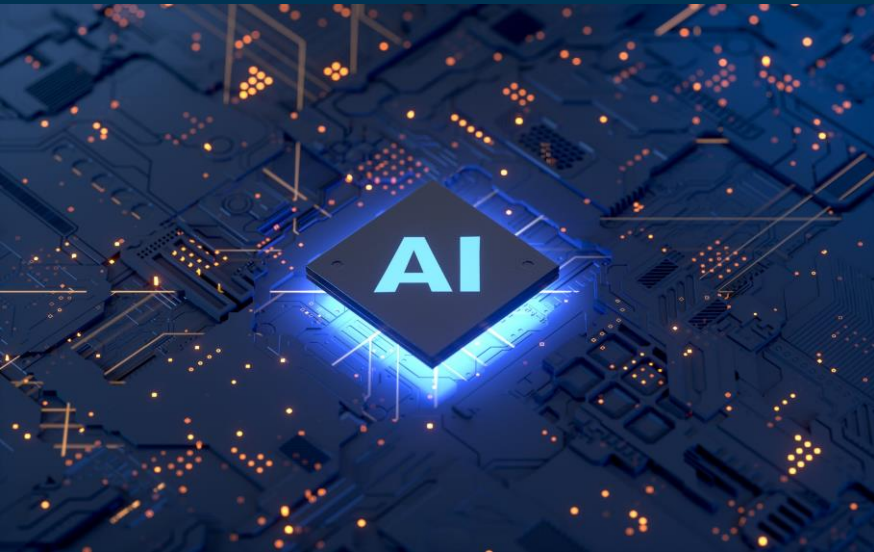
Subject Matter Experts



SP Educator

Standardized Patient

Post Encounter Note (PEN) Scoring



- Traditionally, faculty raters are used to score PENs
- For increased high stakes exam reliability PEN scoring by faculty raters is slowly being replaced by commercially available artificial intelligence

Quality Control of Human Raters

- Trainer Observation and Feedback
- Benchmark Encounters
- Analysis for Drift
- Refresher Training
- Rotation of Cases



Summary

- Simulation methodology is a bridge between classroom learning and real-life clinical experience
- The use of simulations is making significant contributions to health professions education
- Simulation methodology is experiential, collaborative, interactive, and learner centered

References

Association Standardized Patient Educators (ASPE) Website <https://www.aspeducators.org>. Terminology 2009.

Committee IS. INACSL standards of best practice: simulation SM simulation design. Clin Simul Nurs. 2016; 12S5–S12.

Dutile C, Wright N, Beauschesne M. (2011). Virtual clinical education: Going the full distance in nursing education. Newborn and Infant Nursing Reviews, 11(1), 43-48.

Gliva-McConvey G. et al. (eds.), *Comprehensive Healthcare Simulation: Implementing Best Practices in Standardized Patient Methodology*, Comprehensive Healthcare Simulation, https://doi.org/10.1007/978-3-030-43826-5_3

Iancu, A. M., Kemp, M. T., & Alam, H. B. (2020). Unmuting Medical Students' Education: Utilizing Telemedicine During the COVID-19 Pandemic and Beyond (Preprint). doi:10.2196/preprints.19667

Lewis KL, Bohnert CA, Gammon WL, Hölzer H, Lyman L, Smith C, Thompson T, Wallace A, Gliva-McConvey G. The association of standardized patient educators (ASPE) standards of best practice (SOBP). Adv Simul. 2017;2:10. <https://doi.org/10.1186/s41077-017-0043-4>.



Questions



Thank You
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