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#### МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ

### МАТЕРІАЛИ

науково-практичної конференції з міжнародною участю,

# "МЕДИЧНА СИМУЛЯЦІЯ - ПОГЛЯД В МАЙБУТНЄ"

(впровадження інноваційних технологій у вищу медичну освіту України)

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У тезах доповідей науково-практичної конференції з міжнародною участю лікарів,

науковців та молодих вчених, подаються стислі відомості щодо результатів наукової

роботи, виконаної учасниками конференції.

С 37Медична симуляція – погляд у майбутнє (впровадження інноваційних

*технологій у вищу медичну освіту України*) (для лікарів, науковців та молодих

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required for testing and learning of specific skillsets for experienced healthcare participants and students. We can briefly describe those types: Manikin-Based Simulation - gives clinicians hands-on experience and an added benefit of eliminating the risk to an actual patient; Skills-Training Simulation - improves critical thinking, decision making, and clinical techniques all without risk to a real patient; Tissue-based Simulation – gives the learners' opportunity to practice procedural skills outside of the clinical environment, mostly tissue stitching; Virtual Reality Simulation creates an activity in a low-risk simulated environment that is as close to real-life as possible without impacting patient care or patient health; Standardized and Patient Simulation - pairs technical skill with experiential learning to help learners build crucial communication soft-skills necessary for patient care while administering medical care. For better understanding Educational Center may operate with more complex simulation scenarios like a standardized patient can be paired with a task trainer providing learners an opportunity to perform more invasive skills on the task trainer instead of an actual person [2]. The last type of Medical Simulation can provide a more realistic experience for learners.

Medical simulation allows the acquisition of clinical skills through deliberate practice rather than an apprentice-style of learning. Simulation tools serve as an alternative to real patients. A trainee can make mistakes and learn from them without the fear of harming the patient. The skills of a participant of Educational Simulation Centre may be enhanced with the use of the Medical Simulation Scenarios may include technical and functional expertise training, problem-solving and decision-making skills, interpersonal and communications skills, or team-based competencies.

In conclusion, simulation-based training may open a new educational application in medicine and teaching schemes, and trainee or experienced healthcare workers may be more focused on study plan flows of different subjects or topics.

#### References:

- 1. Al-Elq AH. Simulation-based medical teaching and learning. J Family Community Med. 2010 Jan;17(1):35-40. doi: 10.4103/1319-1683.68787. PMID: 22022669; PMCID: PMC3195067.
- 2. Lateef F. Simulation-based learning: Just like the real thing. J Emerg Trauma Shock. 2010 Oct;3(4):348-52. doi: 10.4103/0974-2700.70743. PMID: 21063557; PMCID: PMC2966567.

## ASSESSING AND EVALUATING THE SIMULATION EFFICACY IN EDUCATION? Sydorchuk L.P., Khomko O.Y., Sydorchuk R.I., Kyfyak P.V., Knut R.P.

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For many, assessment and evaluation are synonyms and difference between them is not quite clear. This fact significantly impairs learning efficacy, especially when focusing on simulation learning, which is becoming rapidly growing technique in modern medical education.

We aimed on determining differences between learning assessment and evaluation, as well as attempted to find their combinations and use in simulation leaning.

As defined by the vocabulary, assessment is the action/act of assessing someone or something. It means making an estimation or judgement of the nature, quality, features of someone or something, and means the process of documentation knowledge, skills, attitudes and beliefs.

In difference, evaluation provides the measure for someone's performance, based on systemic determination of worth, merit and significance by means of predominantly established standards and values.

Assessment assures the competence of physicians, provides educators and students with sufficient evidence to inform important decisions regarding student's readiness and progression as well as offering evidence necessary to provide formative feedback and direct development. Educational assessment assists program supervisors in determining the success of a study program through aggregation of learner scores or learner progression over time which is in fact evaluation itself.

Assessment is impossible without introducing the terms "competencies", which are the combination of skills a student has to acquire as a result of education in order to successfully perform required physician activities. The data collection for assessment during simulation training includes structured simulated clinical observations, multi-source feedbacks, mini simulated clinical exams, assumptions/inferences techniques, and final exams.

Structured simulated clinical observations include 3-5 minutes of observation with limited number of feedback points. Students are able to incorporate feedback into future encounters, feeling they are gaining mastery and improving their clinical skills. It is essential to follows adult learning theory teaching approaches with the respect for learner, building on previous experiences, allowing immediate application, and providing sufficient opportunity to practice.

Summarizing the differences and similarities between assessment and evaluation, it looks like it may be better described as a difference between a coach and a judge. Instrument of a coach (assessment) may include feedback, presentation of information, formative approach and direction towards reaching a goal. A judging (evaluation) is based on a judgment, is summative, and is focused on how well the student (learner) met a goal. Simulation-based assessment is complex and requires an integrated approach with professional observers and coaches, mutual understanding of overall goals, inclusion of multiple data sources, and longitudinal capture of many artifacts and scores that may help to reduce bias and provide meaningful noise-free evidence.

#### **References:**

- 1. Al-Elq AH. Medicine and Clinical Skills Laboratories. J Fam Community Med. 2007;14:59-63.
- 2. Al-Elq AH. Simulation-based medical teaching and learning. J Fam Community Med. 2010;17(1):35-40. doi:10.4103/1319-1683.68787.
- 3. Issenberg SB, McGaghie WC, Gordon DL, Symes S, Petrusa ER, Hart IR, et al. Effectiveness of a Cardiology Review Course for Internal Medicine Using Simulation Technology and Deliberate Practice. Teach Learn Med. 2002;14:223-8.
- 4. Ledingham McA, Harden RM. Twelve tips for setting up a clinical skills training facility. Med Teach. 1998;20:503-7.
- 5. Scalese RJ, Obeso VT, Issenberg SB. Simulation Technology for Skills Training and Competency Assessment in Medical Education. J Gen Intern Med. 2008;23:46-9.