

STAND WITH UKRAINE

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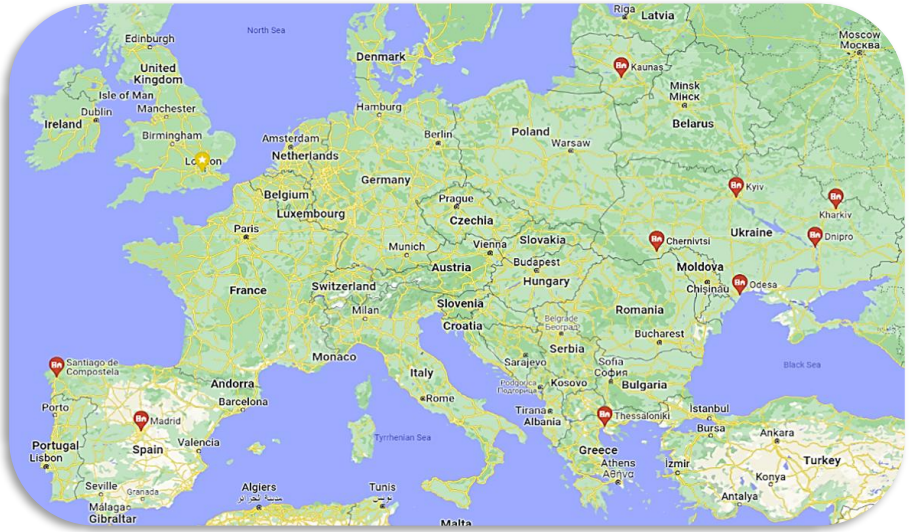
Capacity building cooperation opportunities - CBHE for medical education

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Bukovinian State Medical University, Ukraine

EAIE Glasgow, 08-11 September 2026

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SimS SIMULATION MEDICINE AND SCENARIO-BASED LEARNING FOR EMERGENCY CARE



- **BUKOVINIAN STATE MEDICAL UNIVERSITY** (BSMU), Ukraine
- **UNIVERSIDADE DE SANTIAGO DE COMPOSTELA** (USC), Spain
- **FUNDACIÓN SEMERGEN**, Spain
- **LITHUANIAN UNIVERSITY OF HEALTH SCIENCES** (LUHS), Lithuania
- **ARISTOTLE UNIVERSITY OF THESSALONIKI** (AUTH), Greece
- **NATIONAL ACADEMY OF INTERNAL AFFAIRS** (NAIA), Ukraine
- **DNIPROPETROVSK STATE UNIVERSITY OF INTERNAL AFFAIRS** (DSUIA), Ukraine
- **KHARKIV NATIONAL MEDICAL UNIVERSITY** (KhNMU), Ukraine
- **ODESSA NATIONAL MEDICAL UNIVERSITY** (ONMU), Ukraine
- **NATIONAL AGENCY FOR HIGHER EDUCATION QUALITY ASSURANCE** (NAQA), Ukraine

SimS Project Aim

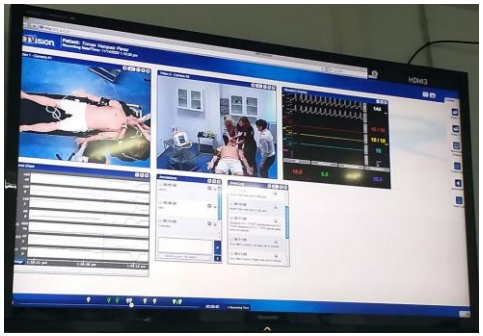
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Improving training and provision of **first aid (including psychological) and emergency care** through the introduction of innovative training courses using **scenario-based learning methodology and simulation technologies** for '**first on the scene**' responders: medical doctors, police officers and schoolteachers.













Simulation medicine and Scenario-based learning for emergency care

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Welcome to OpenLabyrinth

OpenLabyrinth is a standards compliant open source virtual patient authoring and player environment. It is maintained by a group of enthusiasts who love the capability of OpenLabyrinth for virtual patients.

“First on the Scene” training

Collection
SimS_First on the Scene training for police officers
SimS_First on the Scene training for school teachers
SimS_First on the Scene trair
SimS_Перший на місці події
SimS_Перший на місці події
SimS_Перший на місці події

Table 1 List of virtual cases for police officers

N	Case name (emergency)
1.	Adult cardiac arrest
2.	Pediatric cardiac arrest
3.	Airway obstruction (choking)
4.	Massive external bleeding
5.	Chest and abdominal injuries (chest trauma)
6.	Chest and abdominal injuries (abdominal trauma)
7.	Spinal, pelvic and limb injuries
8.	Head, neck and spinal injuries
9.	Burn, frostbite and electrical injury
10.	Convulsive syndrome
11.	Triage at the scene of an accident
12.	Evacuation from under the rubble. Crush injury



Fig. 1 The exemplary linear labyrinth (blue - key node; green - optimal decision; yellow - suboptimal decision; red - incorrect or dangerous decision)

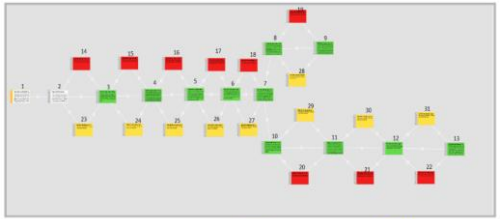


Fig. 2 The exemplary semi-linear labyrinth (green - optimal decision; yellow - suboptimal decision; red - incorrect or dangerous decision)



Fig. 3 The exemplary linear labyrinth (blue - key node; green - optimal decision; yellow - suboptimal decision; red - incorrect or dangerous decision)

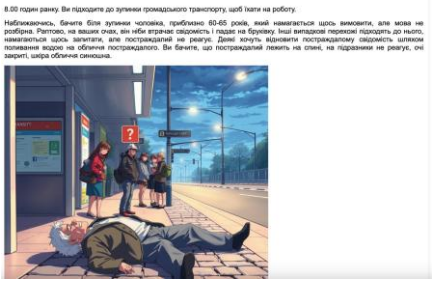




Fig. The exemplary pages of the case from the training course “SimS_First on the Scene training for police officers” on the OpenLabyrinth platform (*Photo courtesy of NAIA, 2024*)

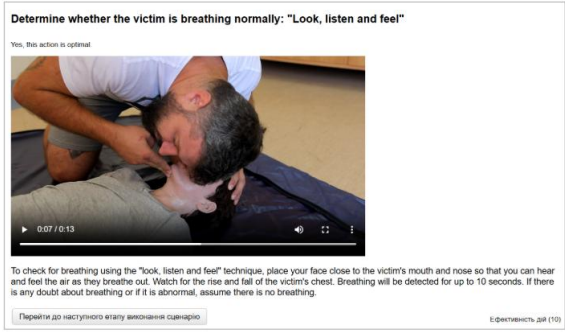


Fig. The exemplary page of the case from the course “SimS_First on the Scene training for school teachers” on the OpenLabyrinth platform (*Video courtesy of ONMedU, 2024*)

Simulation medicine and Scenario-based learning for emergency care

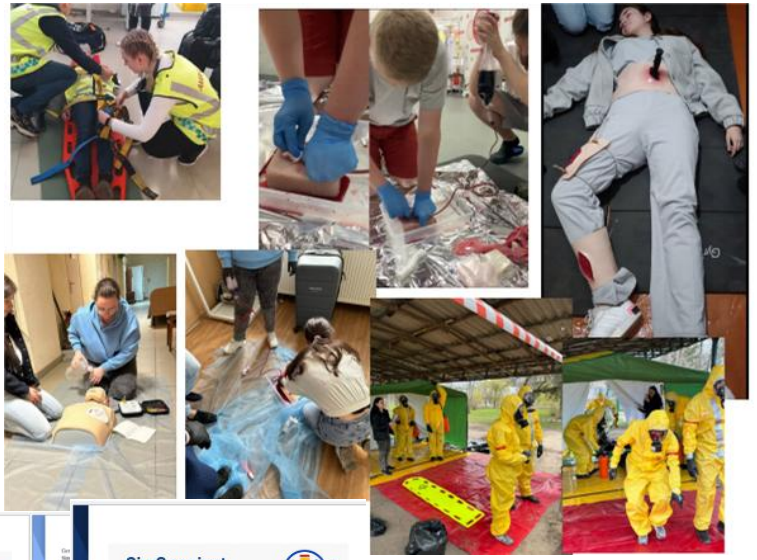
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During the project, the courses were successfully completed by:

- 480 medical students;
- 365 cadets and 90 police officers;
- 160 school teachers.

In total, the project covered 1270 participants, including 50 teachers and instructors.

Electronic teaching and methodical manuals were published in Ukrainian and English: **Simulation and scenario-based training in emergency care: a manual for teachers and trainers.**









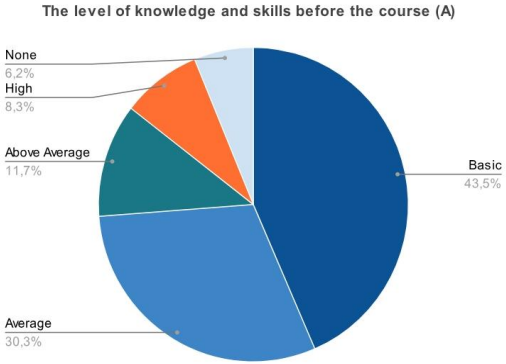
SESAM SOCIETY FOR SIMULATION IN EUROPE
IMPROVED HEALTHCARE THROUGH SIMULATION

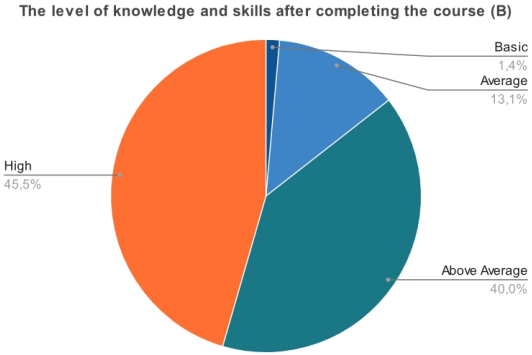
https://sims-project.eu/

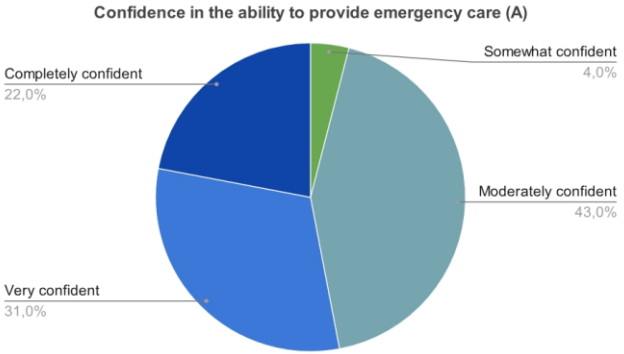
Simulation medicine and Scenario-based learning for emergency care

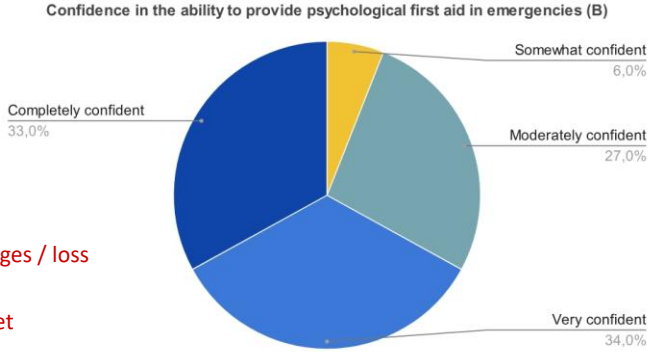
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Self-assessment of the course effectiveness









- pre-training: **majority had limited to basic knowledge and skills**
- post-training: **significant improvements in performance** among all cohorts (up to a 25% gain)
- **greater confidence in performing emergency medical interventions and providing psychological first aid** (over 90% of participants)
- **high level of learner satisfaction** with the course: aligned with or exceeded expectations, relevant to professional duties, improved competence, effective pedagogical design, comfortable and psychologically safe learning environment.

Challenges:

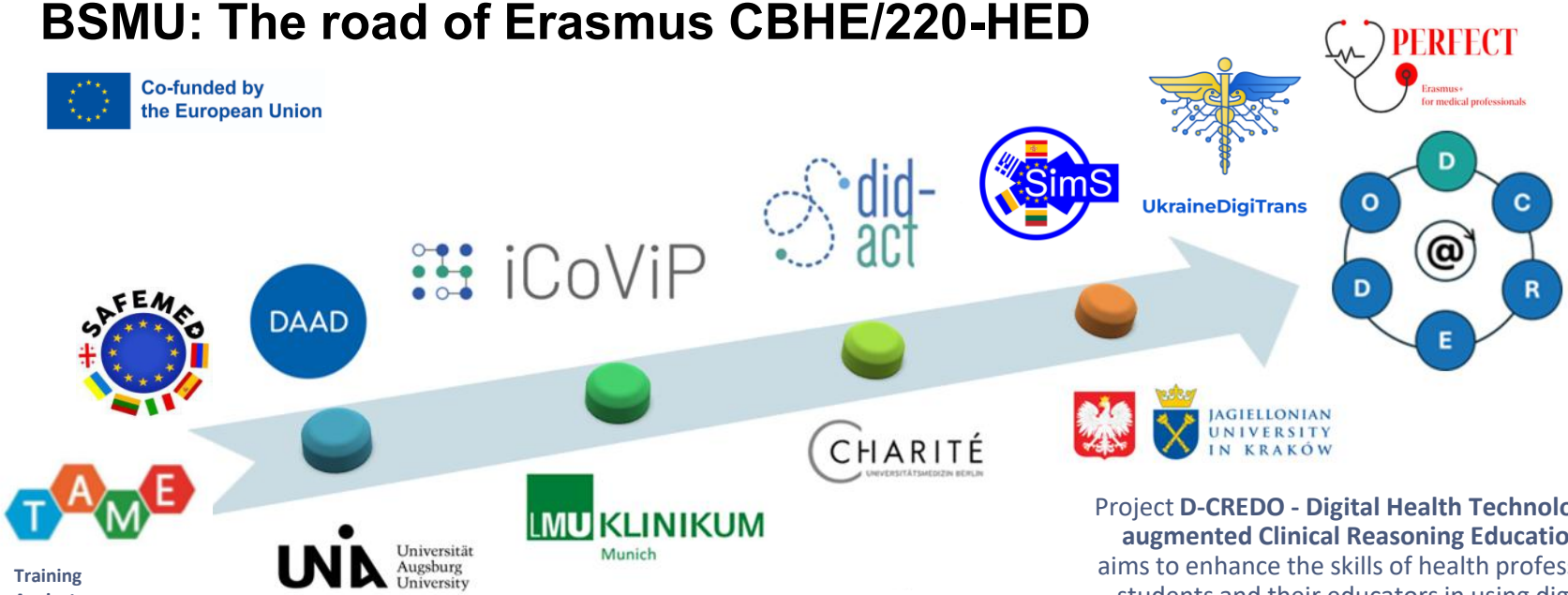
Delivering to Ukraine!

Male participants / changes / loss of participants!

+time, blackouts, internet connection issues

Anxiety/depression, emotional burnout

BSMU: The road of Erasmus CBHE/220-HED



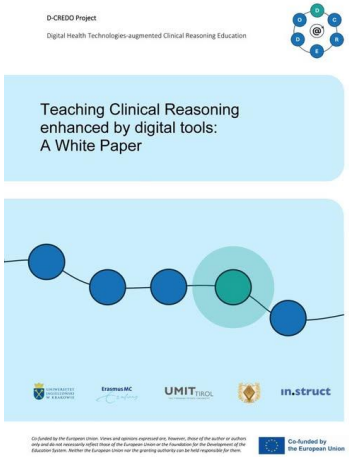
Training Against Medical Error (AUTH, BSMU)

iCoViP International Collection of Virtual Patients

[Project with Ukrainian partners](#) successfully completed

Project **DID-ACT** - Developing, implementing, and disseminating an adaptive clinical reasoning curriculum for healthcare students and educators

Project **D-CREDO - Digital Health Technologies-augmented Clinical Reasoning Education** - aims to enhance the skills of health professions students and their educators in using digital health in clinical reasoning

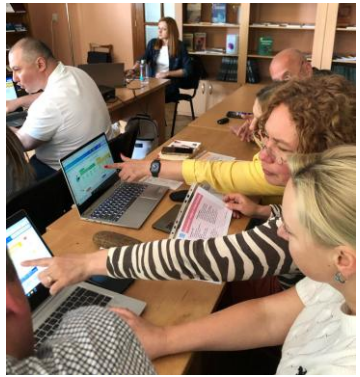


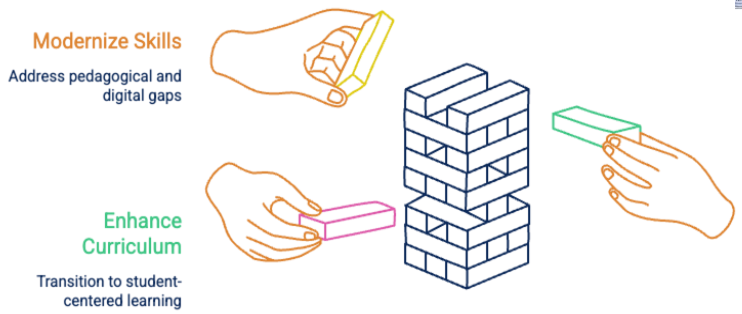
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MEDICAL EDUCATION DEVELOPMENT
UKRAINIAN-SWISS PROJECT

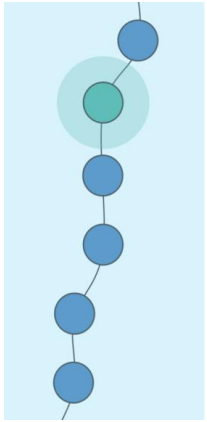
UkraineDigiTrans

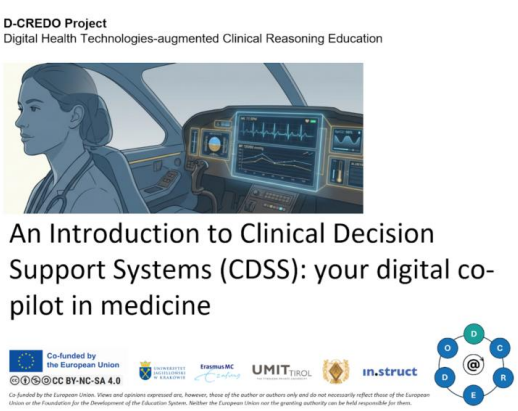












Training courses were held to improve the professional skills of teachers (agents of change):
- Digital Pedagogy
- Methods and Tools of Sustainable Medical Education
- Digital Technologies in Education
- Medical communication, CCD
- Case Method in Medical Education: Modern Approaches, Digital Technologies and AI Tools



Training “**Basic Emergency Care**” with the support of the Ministry of Health of Ukraine and WHO (2024-2025)



Psychological support - mhGAP, “Mental health in Ukraine”, “Problem Management +" projects (2022-)

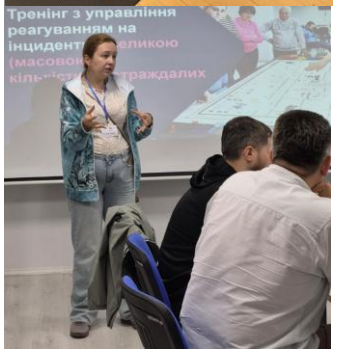


Equipment, course development, instructor training - as a result of the development of the SimS project:

Training for school teachers of Chernivtsi region **on emergency care and behavior during disasters** as part of the cross-border project SHIELD (2025-2026) - 10 schools - a total of about 700 students, 20 teachers.

A series of trainings for doctors in frontline cities on **Mass Casualty Management** - 2025-2026.



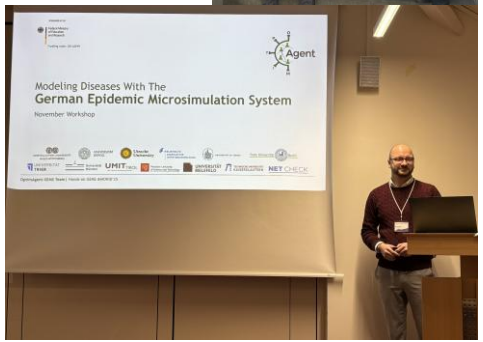






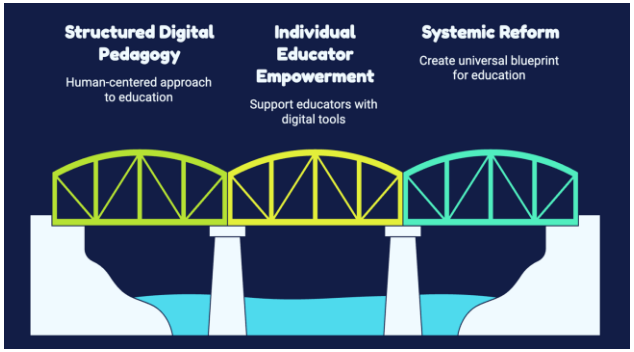
Modelling with GEMS (MONID)





Impact of the Full-Scale War in Ukraine on Higher Medical Education

Since the onset of the full-scale war in Ukraine in 2022, the structure and demands of higher medical education have undergone significant transformation. Key implications include:



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War-Relevant Specialties

War-relevant specialties are much needed which demands HEIs to provide quality education despite crisis periods





Hybrid Learning Models

Hybrid learning models offer high adaptability and are modified due to given military conditions

Traditional Education

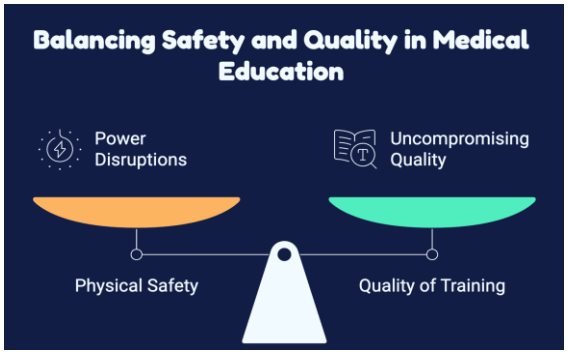
Traditional education lacks adaptability in crisis conditions and has a room for improvement

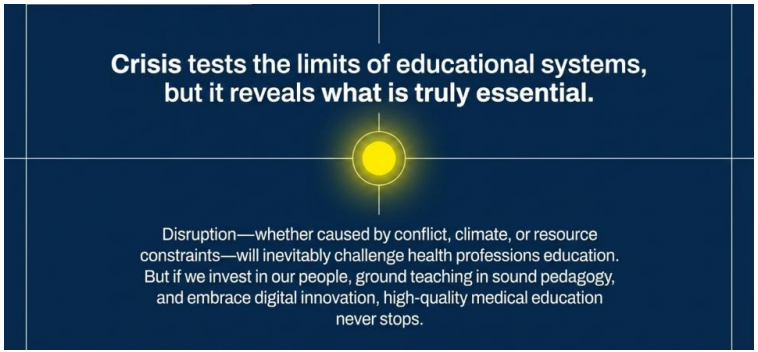




Digitalization of Education

Digitalization enables educators to maintain teaching process in times of crisis but demands digital skills from them





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