



FEDERAZIONE NAZIONALE ORDINI PROFESSIONI
INFERMIERISTICHE



STATO MAGGIORE DIFESA
Ispettorato Generale della Sanità Militare

CLINICAL SIMULATION IN THE SPANISH ARMED FORCES

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INTRODUCTION



WHY USE THE CLINICAL SIMULATION?



- EDUCATION
- EVALUATION
- INVESTIGATION.
- INTEGRATION PROCEDURES

CLINICAL SIMULATION IN MILITARY EDUCATION



- Obligatory training before deployment in AO.
- Specific education of the cadets of the Military Medical Corp.
- Postgrade education of officers (PhD and RN).
- Improve, reinforce, optimize and integrate:
 - Transversal and basic competences.
 - Clinical care and casualty safety by minimizing errors.
 - Leadership capacity.
 - Management of critical casualties in a multidisciplinary approach.



ADVANTAGES



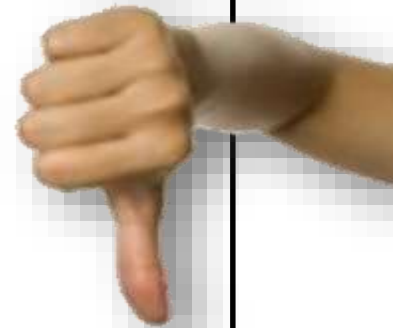
- Prioritize the student.
- Simulation decreases the learning curve.
- It allows to emulate unusual environments.
- It allows to escalate the learning level.
- It increases the casualty safety.
- Evaluation of competences and abilities.
- Presentation to the professional to a new work environment.
- It allows a real time feedback.



INCONVENIENCES



- At the material resource level:
 - High cost.
 - Institutional financial support.
 - It does not allow to emulate all the real life situations.
 - At the human resources level:
 - Specialized training
 - Instructors shortage
 - We spend a lot of time developing clinical cases.
 - Permanent and specialized staff is required.
- Stress should be a tool not an impediment to learning.



CLINICAL SIMULATION IN COMBAT TRAUMA TRAINING



1



Added stress
to student

2



Recreate an
unusual
environments

3



Test
equipment
and devices

4



Integrate
knowledge

5



Generate
muscle
memory

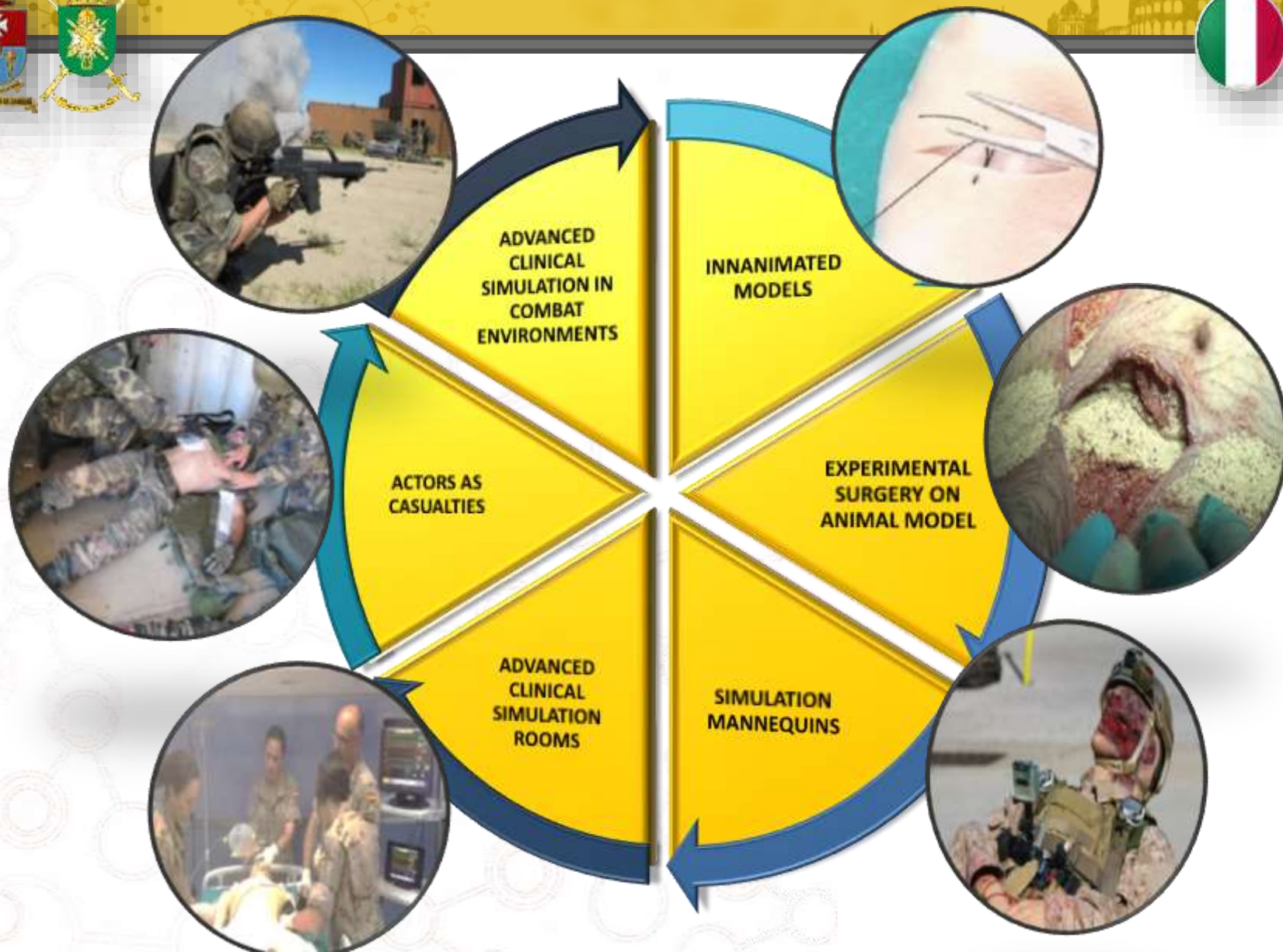
WHICH IS OUR GOAL?



**TRAIN AS YOU WORK
AND
WORK AS YOU TRAIN**



WHAT ARE WE DOING?



SIMULATION TOOLS



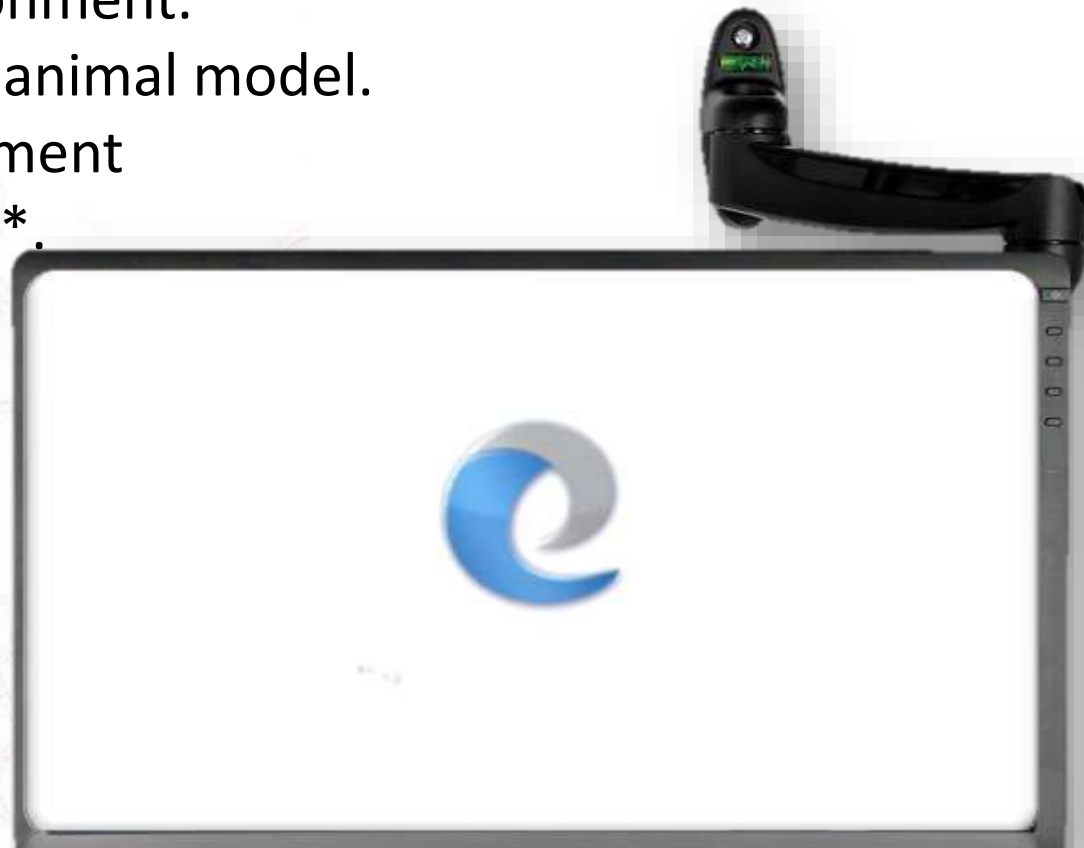
- Life animals.
- High-fidelity task trainers.
- Low-fidelity manikins.
- High-fidelity full human manikins.
- Actors taking the role of casualties.



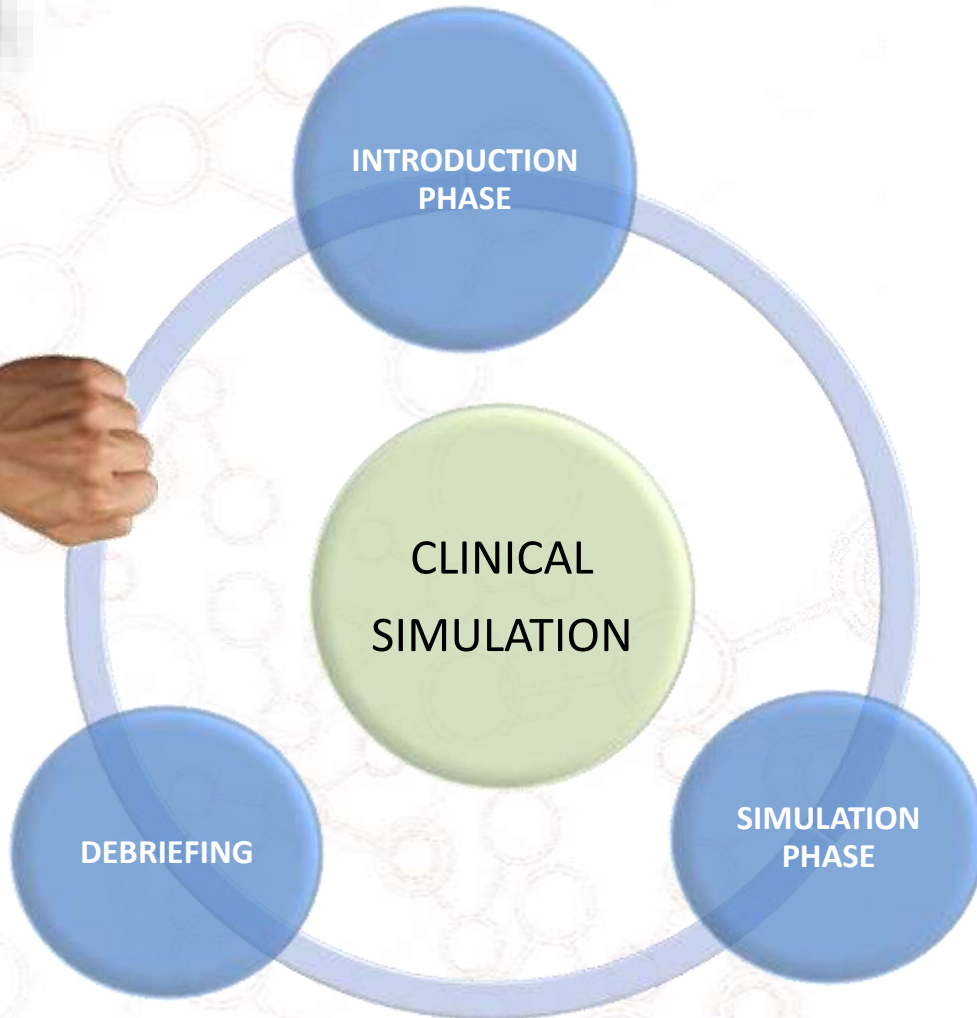
SIMULATION TOOLS



- High fidelity clinical manikins.
- Characterized simulation and fx.
- Simulation in virtual environment.
- Experimental surgery with animal model.
- Combat and tactical equipment
- SVACOM simulation field **.



HOW WE DO IT?



TACTICAL TRAINING AREA



- Projected in 2007 created in 2008. Not finished yet.
- **MATERIAL RESOURCES:**
 - 2 Armored vehicles
 - 1 UH model Helicopter
 - 1 Tactical truck
 - 3 light tactical vehicles.
 - 1 medium fidelity simulation classroom.
 - Advanced clinical simulators
 - Specific technical simulators.
 - Tactical and medical supplies.



ADVANCED CLINICAL SIMULATION AREA



CONCLUSIONS



1. CS represents an improvement in:
 - Medical training and instruction processes.
 - Instruction in skills and procedures.
2. Institutional economic support is required.
3. Specialized education for simulation providers.
4. CS is an optimal tool to evaluate professional competencies and abilities.
5. We should use epidemiological and tactical data to decide the most effective learning strategies.



GRAZIE PER LA VOSTRA ATTENZIONE



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