Telesimulation designed for undergraduate students of surgery
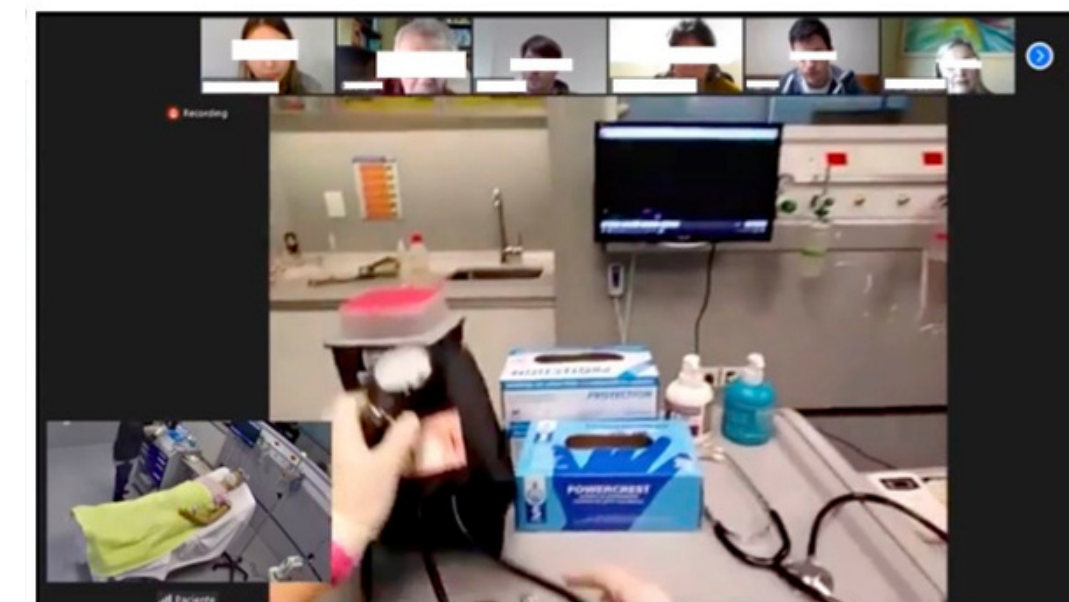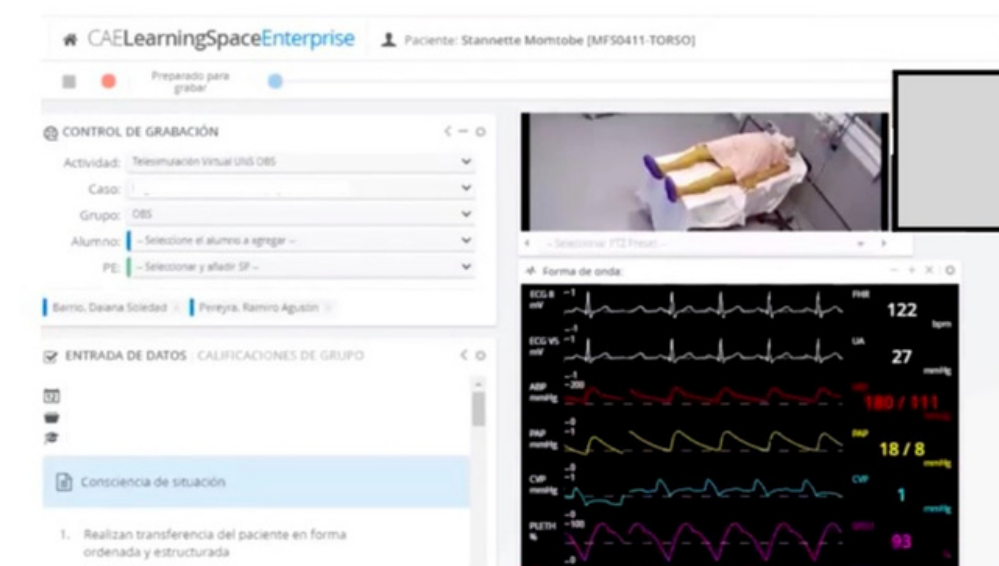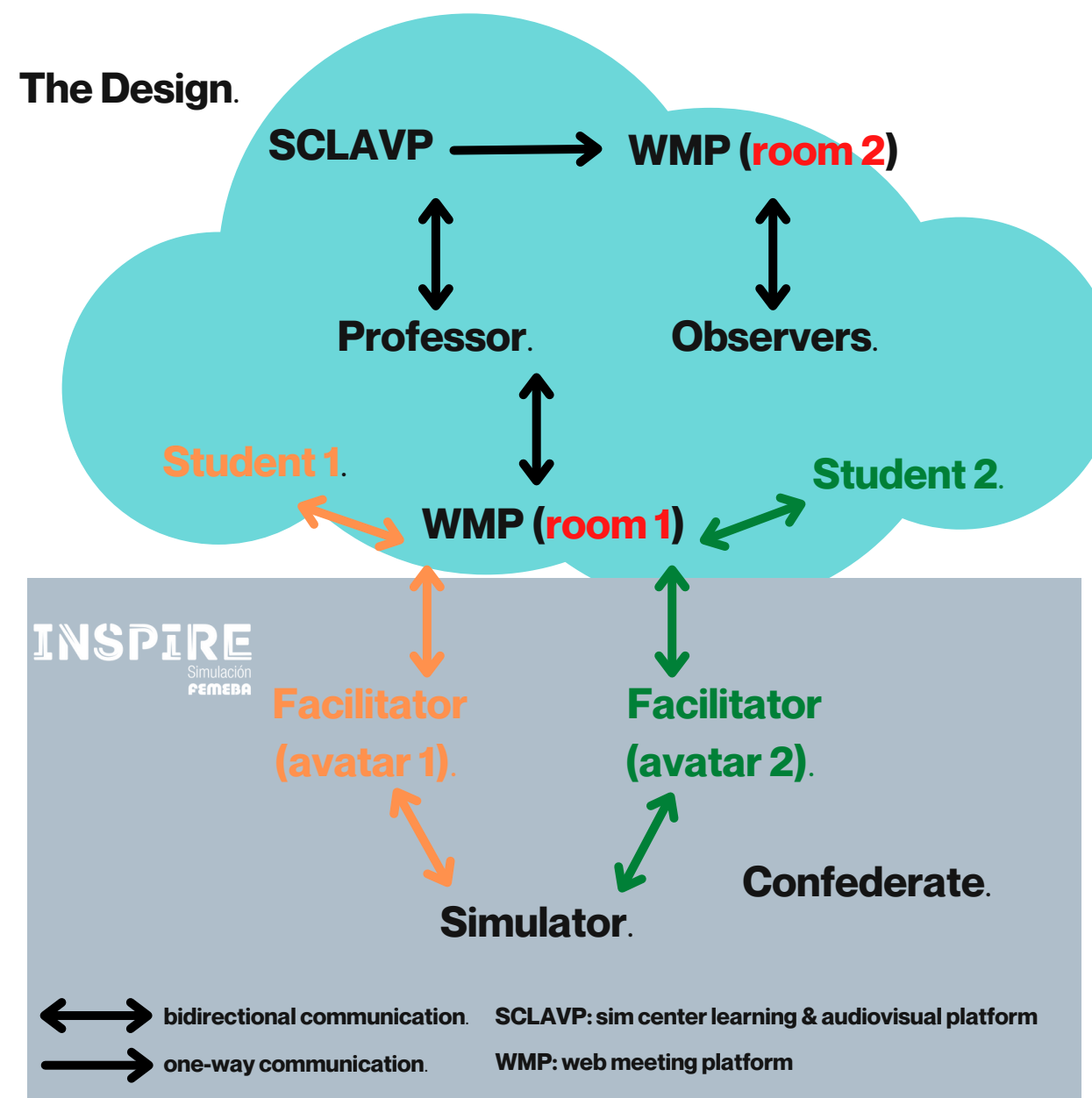
*"delivering high quality and accessible clinical teaching strategies **without reinventing the wheel.**"*

Jl. Cobian, E. Ortiz.

The problem & aim. The current COVID-19 pandemic challenged clinical teaching by affecting the normal development of face-to-face activities including simulation center´s activities. Even more, simulation came up with some restraints about accessibility. Solutions are needed to help mitigate these effects, making clinical practice more accessible and affordable, especially in low and middle income countries. Simulation center´s resources and low cost avaliable software are some strengths and opportunities to reshape the way we deliver clinical teaching in a more efficient and fully interactive manner.

Methods. 26 students had remote immersive high-fidelity telesimulation using a web meeting platform that allowed them to experience and analyze critical situations and plan solutions. The data analysis was carried out from a quantitative-qualitative approach, focusing on the experiences of the participants. A satisfaction survey, the debriefing transcripts and an open ended question about learning perception were analyzed, by coding the latters, in order to find the learning opportunities of clinical reasoning and non-technical skills as well as the attributes of the method perceived by the students.

The Design.

SCLAVP → WMP (room 2)

Professor. — Observers.

Student 1. — WMP (room 1) — Student 2.

INSPIRE Simulación FEMEBA

Facilitator (avatar 1). — Facilitator (avatar 2).

Simulator. — Confederate.

← → bidirectional communication.

→ one-way communication.

SCLAVP: sim center learning & audiovisual platform

WMP: web meeting platform

Results & reflection after practice. 91% of students considered they have learned a lot and 100% that content was relevant. Everyone would recommend the activity to other people. During the debriefing phase, performance aspects have emerged in relation to the diagnostic hypothesis, complementary studies, treatment and non-technical skills. In addition, there was a perception of learning beyond that offered by reading content. High-fidelity telesimulation using web meeting platforms that allow students to experience and analyze critical situations and plan solutions is possible. As a learning opportunity favors clinical teaching. As a communication and information technology achieves high fidelity and improve accessibility to simulation.