

P2491 Simulation as a tool for improving sepsis guidelines complianceEduardo Rodrigues*¹, Carlos Palos², Sebastiao Barros¹, Marta Mendes¹, Luis Patrao¹, Francisca Leite³¹ UpHill, ² Hospital Beatriz Ângelo, Loures, Portugal, ³ Luz Saúde**Background**

Sepsis is a major healthcare problem, causing 6 million deaths worldwide every year with recently published guidelines about its timely recognition, management and treatment. However, due to systematic errors, sepsis is commonly unrecognized, its management is impaired, and the definite treatment delayed, increasing morbidity and mortality. The etiology of those systematic errors is completely not perceived by healthcare teams. Although the answer could have a great impact in public health, the questions themselves are still neglected by healthcare institutions and systems. To address these issues, UpHill developed a clinical pathway-based compliance analysis software in which healthcare professionals train previously uploaded simulated clinical cases: UpSim.

Materials/methods:

A sepsis scenario was developed, combining a *Surviving Sepsis Campaign* based clinical pathway for its management, patient history and physical exam, evolution through clinical encounters and complementary exams. Physicians from a major Portuguese private hospital were invited to use the simulated electronic health records software to approach and treat the virtual clinical case, supported by instant feedback and targeted scientific evidence. Compliance with defined bundles was analysed as the scenario evolved.

Results:

This pilot addressed a total of 28 physicians, evidencing a mean compliance of 49% with the clinical pathway, of which 40% unsucceeded to prescribe the correct bundle. This step alone is proven to decrease mortality in 14%. Compliance for the correct antibiotic prescription was 71%, thus identifying an educational need. Adding to that, the hospital gathered details about the compliance for individual activities of the sepsis clinical pathway, promoting performance improvement and pathway redesign.

Conclusions:

In this pilot study, the compliance levels achieved with the sepsis clinical pathway were low, exhibiting that there is still potential for improvement. Through a user friendly, quick and immersive training, one can practice on a simulated clinical case, which allows to make clinical decisions and receive evidence-based feedback. UpSim reduces deviations from pathways and helps understand how well adjusted to the daily practice clinical recommendations are, allowing further institutional and individual improvements.

