A user needs assessment of simulated learning environment in regional anaesthesia

Aims

Proficiency based curricula are replacing traditional apprenticeship models in postgraduate medical education. Simulated learning environments are important in developing and assessing technical and non-technical skills. The Department of Health (UK) recommend ‘As part of a managed learning process ...healthcare professionals should learn skills in a simulation environment ... before undertaking them in supervised clinical practice’. The RASimAs project, funded by the European Union, aims to develop a high fidelity simulator to train and assess regional anaesthesia skills.

Method

Clinical collaborators based at University College Cork, Ireland; Katholieke Universiteit Leuven, Belgium; and Uniklinik RWTH Aachen, Germany were surveyed to identify perceived user needs from multiple perspectives. Feedback from the collaborators was collated into user stories, which describe the needs of individual user groups. Systematic need assessment for ultrasound- and electrical nerve stimulation-guidance was performed. The output of this process has been used to inform ongoing simulator system design.

Results

A regional anaesthesia simulated learning environment has diverse user needs dependent on user group. The user needs of trainees centre on the provision of a structured curriculum, realistic learning environment, timely performance feedback and the ability to measure and track performance over time. The needs of trainers and professional bodies (standards regulators) relate to the validity of the system, the learning efficacy of the simulator and the ability to track performance metrics of individuals and trainee cohorts.

Conclusion
Technical skills training and assessment in regional anaesthesia is a high stakes process which requires valid tools to improve both clinical practice standards and patient safety.

Documents

Keywords
Simulation
Education
Proficiency