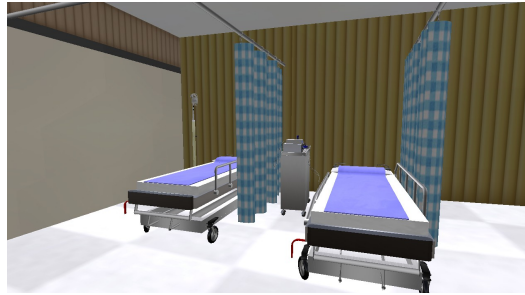


The Medical Sector has been one of the early adoptors of virtual world technology. Partly driven by the needs of defence medicine, but also by the overall cost and sophistication of medical training the last few years have seen many virtual world platforms used to develop and deliver solution for medical training and health services delivery.



Training the Professionals

Quite apart from the surgery specific work being done with medical simulations, virtual worlds are now being used as hosts for both ward and patient level simulations.

At the patient level much of the focus is on electronic virtual patients. These are typically flow-chart based exercises conducted on the web as part of a practioners training or assessment. But in virtual worlds not only can we create a more immersive environment, but we can also create far more non-linear, and hence realistic, scenarios. For instance the Paramedic assessment tool that we are developing for St George's Hospital present the student with an accident scene and an inventory of tools and drugs which match what they carry on the ambulance – but what is used, and in which order, is left completely up to the student.

One key development in the virtual patient arena is the Medbiquitous Virtual Patient (MVP) standard. This lets us script scenarios on the web, but then play then in almost any virtual world – or on the web. Changes can be made by course tutors rather than virtual world or even IT professionals. This enables scenarios to be developed, shared and adapted more easily, costs to be saved, and investment protected if the virtual world technology is changed. Indeed our MVP virtual world interface for Second Life will shortly be released as an Open Source product.

As well as individual patient simulations virtual worlds can also support multiple patients (and of course multiple students), in both ward based and emergency incident scenarios. In the latter other agencies such as Police and Fire can also be brought in so as to explore inter-agency co-operation for major incidents.

Another aspect is the ability of virtual worlds to support eDrama. This lets us create scenarios which can be acted out by automated avatars in front of students (who can actually move in and around the action), or where the students engage in direct dialogue with the avatars – who can play patients, managers or colleagues.

Public Health

There has been considerable interest in using virtual worlds to support public health. This is centered around two facets of virtual worlds – informal, immersive learning, and “anonymous intimacy”.

Virtual worlds can create environments where learning is almost a natural activity. By creating interesting visual space filled with audio, video, animation and information, users can wander at will and learn about health issues with little of the formality which typically comes with web based equivalents. The workings of the human body can be represented at any scale, from cells to complete skeletons, and users can explore them in their own way.

Anonymous intimacy is the term given to the situation in a virtual world where the user can “hide” behind their avatars looks and name, but engage at a very personal level with another user. This has already been taken advantage of by health and care professionals to support anonymous counselling on issues ranging from sexual health to cancer.

Moving Forward

If you think that virtual worlds could help you deliver better health and care services, either to professionals or end-users then we'd be more than happy to come and present to you to give you a better understanding of what this technology can offer now, and where it might be going in the future. Please give us a call.

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