

Current hot topic: Simulating EPR in Healthcare

The Electronic Patient Record has changed dramatically over the last 20 years as NHS Trusts start embracing computer systems to record details about the patient's medical journey. These include information such as nursing and medical notes, radiology, clinical observations on NEWS 2, prescribing, etc.

For many years every simulation scenario I supported had a whole set of physical paperwork. These props were either laid out in the scenario room in the patient folder at the end of the bed for the candidates to look through to see the patient history or was hidden in various locations that we would inform the candidates about once they had completed the appropriate clinical task. For example, the doctor would consent the patient manikin and role-play, taking an ABG with a provided prop. When the facilitator decided it was appropriate, I would use our microphone to inform the candidate over the room speaker that their ABG results were back and could be found under the blue tray.

This process used to roughly approximate how our clinicians dealt with real patients until we got an EPR system several years ago. Not long after that I knew the fidelity of our simulations was really in trouble when a medical student looked at our paper drug chart during a scenario and said they had never seen one before and didn't know how to use it!

As simulation technologists and educators one of our main challenges is how to accurately represent 'real' Healthcare effectively and smoothly in our scenarios, to provide the best possible learning environment.

I believe a simulation service has four main options regarding the emergence of computerised EPR systems:

1. Carry on using physical paper props – however this no longer mirrors reality.
2. Use the organisations real EPR training system – Cerner, Epic and Rio all provide one, but they can be inflexible, overly-complicated and designed not for simulation use, but for teaching how to learn to use that specific system.
3. In-house programmed solution – some organisations have now spent considerable time creating their own system, with some impressive results. These are often using Microsoft Excel, but in some cases the simulated EPR interface looks so good you would never realise it! At least one trust is kindly allowing other trusts to use their created source code, thus saving a lot of time 'reinventing the wheel'.

4. Commercial solutions – at least one trust has paid for their own system to be developed, but the costs soon started adding up when they wanted additional or changed functionality. There is also a commercial simulated EPR system available that has impressive features and has been bespoke designed specifically for use in healthcare simulation, but at a not-inconsiderable annual cost.

This article is a short summary from my three-part series published by the London Simulation Network in the first six months of 2024.

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