A boost to quality of

Michael Moneypenny and **Alistair Geraghty** offer insight into how simulation-based education can enhance patient safety

Culture is the driving force behind our day-to-day working. It informs what we do, how we do it and what we value. It will override even the best-laid plan. In the well-worn words of business guru Peter Drucker: "Culture eats strategy for breakfast."

Within healthcare a poor safety culture is an oft-cited contributor to adverse events – particularly in large-scale events where there has been a slow drift toward failure within institutions. Mid Staffordshire, Vale of Leven and Morecambe Bay all suffered from a poor safety culture. While we recognise culture exists and holds great influence, it can be challenging to define and understand.

James Reason (of Swiss-cheese-model fame) considered safety culture across five domains:

- Just culture
- Reporting culture
- Informed culture
- Learning culture
- Flexible culture

A just culture is one in which individuals are not punished for unintentional errors or errors that have been driven by wider systemic influences. Individuals do not fear being the scapegoat and trust the organisation to recognise and address wider systemic factors. Equally, if an individual has acted recklessly, negligently or in a deliberately harmful manner, they can expect disciplinary action. This fair atmosphere generates trust and avoids errors being hidden from view.

A reporting culture is one in which individuals are encouraged to disclose and report errors or near misses, identify causes for concern and suggest improvements. An organisation has to demonstrate that it values the discovery and disclosure of errors as opportunities for improvement rather than a mechanism to punish. A reporting culture requires that individuals do not fear blame. Reporting has to result in action so that individuals see it as worthwhile.

In an informed culture organisations collect, analyse and disseminate safety information. The organisation recognises the

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complexity of safety and takes time to understand and analyse work as it takes place on the front line – 'work as done' as opposed to the 'work as imagined'. The latter may appear on a job plan or patient pathway without taking account of the nuances, pressures and trade-offs that take place in everyday work.

A learning culture is one in which acquiring new skills and knowledge is encouraged and valued at every level, from the individual worker to the team and wider organisation. Errors are opportunities to learn and develop. Learning is an active process; we do it for ourselves. This contrasts with a training culture, where training is a passive process that is done to us.

In a flexible culture an organisation and the people within it are adaptable and open to changing patterns of work to meet demand. Individuals understand the skill sets and responsibilities of others within their team and can work in a synergistic way to monitor and cross-cover to maximise their collective potential for effective working.

Safety culture can be influenced in a number of ways. High-level programmes such as the College's 'Let's Remove It' anti-bullying campaign and NOTSS programmes help develop aspects of a just, flexible and learning culture. They also encourage a more holistic understanding of error development, in part by identifying behaviours that can positively and negatively influence safety. They help to shift perception of what is acceptable behaviour in the workplace.

THE POWER OF SIMULATION

Regular simulation-based education can also act as a powerful mechanism to adjust healthcare culture. Simulation is a tool, device or environment that mimics an aspect of clinical care for learning. A task or procedure is performed, the performance is analysed, self-critique and/or external feedback are used to improve or correct performance and the procedure can be practised again. Its simulated nature removes potential adverse consequences, making it both clinically and psychologically safe.

Simulation can help create a safety culture as it maps well to each of a reason culture's domains. A well-run simulation establishes a just culture. Individuals are not blamed for their actions or omissions. The goal is to understand the reasoning behind the actions and to improve performance.

A reporting culture sits at the heart of effective simulations. Participants are encouraged to admit to and reflect on mistakes. They know that their concerns and the reasoning behind their actions will be listened to.

The best simulation-based learning exercises encourage an informed culture. These simulations are run and the debrief is carried out with the aid of content experts. This means that participants experience and interact with 'work as done'. It also means that simulations can be used for system improvement as the knowledge gleaned from them can be used to revise processes, algorithms, workflow and so on.

> **"The safety culture evident in well-run simulations will cross over into everyday work"**

Simulations are the product of a learning culture. The simulation-based learning event (SBLE) is not just for undergraduates or health and social care professionals 'in training'. Because experience is not expertise, and skills both plateau and then fade over time, the SBLE exists for the life-long learner. Simulation also encourages a flexible culture. Immersive simulations look at teamwork, supporting others, cross-monitoring of tasks and other non-technical skills. They also encourage inter-professional education and, by their nature, honest discussions about responsibilities, hierarchies and hidden curricula.

As simulation is increasingly used as a technique for acquisition of knowledge and skills, we believe that the safety culture evident in well-run simulations will increasingly cross over into everyday work. We believe this process should be encouraged and, if done well, will improve patient safety and quality of care.