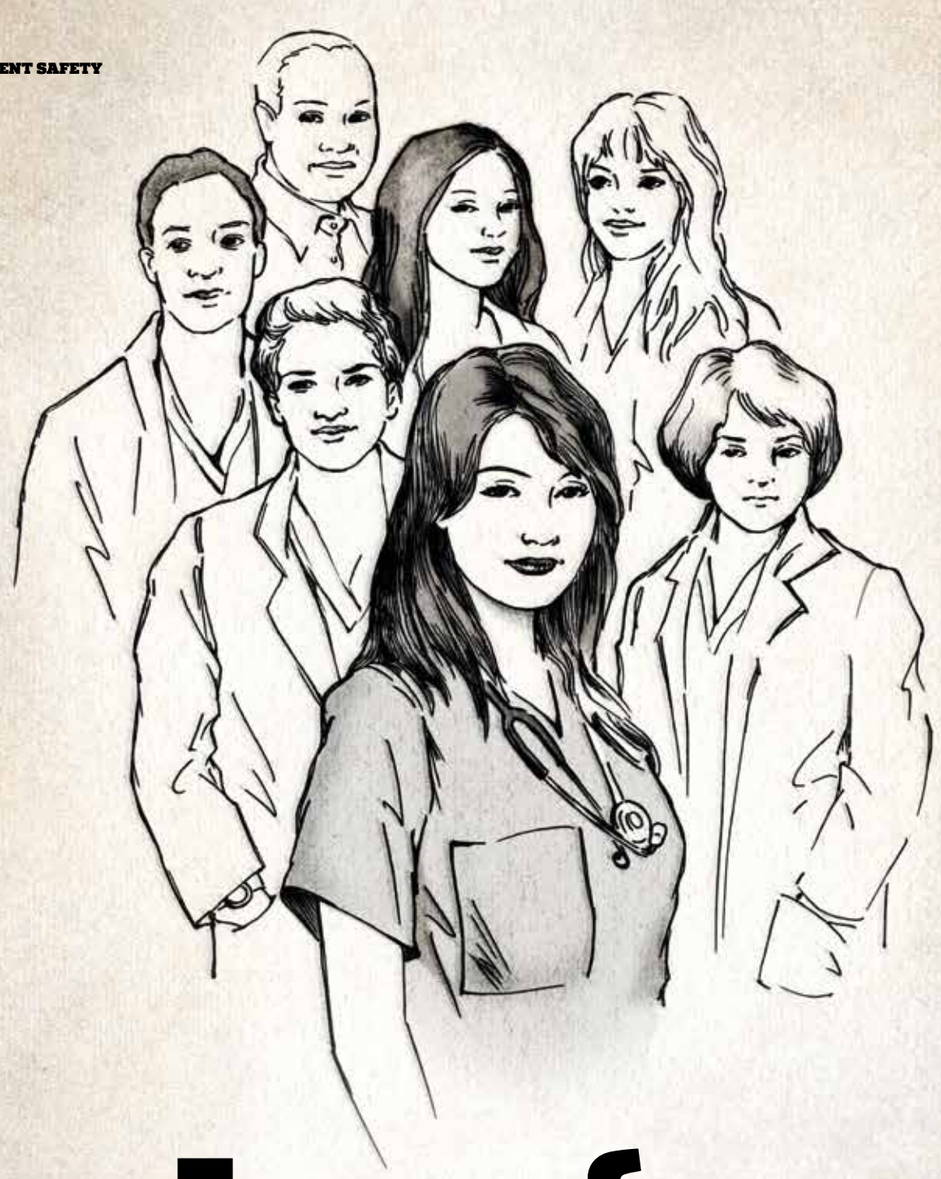

In safer hands

'Human factors' is key to improving safety in healthcare. **Anna Paisley** and **Alistair Geraghty** outlines the three principles set out in the CIEHF's white paper on the discipline and the College's plans to adopt the approach

'Patient safety' can be difficult to define and the traditional view as 'the absence of avoidable harm' is changing. Current thinking has started to recognise that defining safety by what it is not – harm – is backward-looking and identifiable only after an adverse event has taken place.

When examining adverse events we identify missed opportunities or skipped steps, but often neglect the wider context. The tragic case of Jack Adcock and Dr Hadiza Bawa-Garba brought this to the fore. Furthermore, press attention on stress, fatigue and burnout among clinicians suggests we need a broader definition of patient safety to encompass patients, providers and the system.

'Human factors' (synonymous with ergonomics) has risen to prominence within healthcare over the past decade. It involves the scientific study of interactions between humans and the wider system. This informs the design of safer and more effective working, ranging from product design to shift patterns to regional organisation. The discipline integrates elements of anatomy, social science, engineering, psychology, design and organisational management. Within healthcare, human factors is conflated with human error. Human factors does involve acknowledging human limitations and the work conditions that could make us more prone to error but its aim is to design systems that mitigate risk and make it easier to perform at our best.

THE CIEHF APPROACH

The Chartered Institute of Ergonomics and Human Factors (CIEHF) is the professional body for ergonomists and human-factors specialists in the UK. Established in 1949 and awarded a royal charter in 2014, the institute sets standards in qualifications, experience, continuing professional development and codes of conduct. It can confer chartered status on professional practitioners. The CIEHF's white paper, *Human factors for health and social care*, delivers a patient-safety strategy fit for modern practice. It sets out three broad principles: systems focused, design led, and improving wellbeing (of patients and staff) and system performance.

SYSTEMS FOCUSED

The white paper encourages us to consider all aspects of work as part of a system, be that at a micro (task), meso (team) or macro (larger organisation) level. The paper signposts tools such as the System Engineering Initiative for Patient Safety model. This aims to develop understanding of how patients, providers, equipment, tasks, hospitals and regulators interact to influence work processes and outcomes. Improving patient safety has as much to do with maximising the things that go right as minimising the things that can go wrong.

Following an adverse event it is tempting to adopt a 'find and fix' mentality to look for quick remedies. Wider consideration of the context helps avoid potential unintended consequences and clarify a longer-term strategy to provide successful sustainable improvement. We must recognise human error not as the cause of problems in the system but *indicative* of problems in the system. Encouraging healthcare providers to work alongside the ergonomics community to select appropriate tools and methods will help maximise potential interventions.

DESIGN LED

Being design led involves working to improve safety through the development of tools, processes and systems that make it easier for people to do things correctly. This person-centred, multidisciplinary approach combines what the person (patient and provider) needs to be able to perform successfully (taking account of physical, cognitive, psychological or social demands) with the standards and guidelines that need to be fulfilled.

Time should be taken to understand how to perform a job in the workplace – 'work as done' – as opposed to 'work as imagined' as it may appear on a well-designed flowchart. When reviewing events we are encouraged to "ask why an action made sense at the time". This is more likely to result in protective system changes as opposed to apportioning individual blame. It also makes it less likely that the error will be repeated.

> **"Its aim is to design systems that mitigate risk and make it easier to perform at our best"**

Anna Paisley
Consultant General and Upper GI Surgeon at the Royal Infirmary of Edinburgh, Member of RCSEd Council

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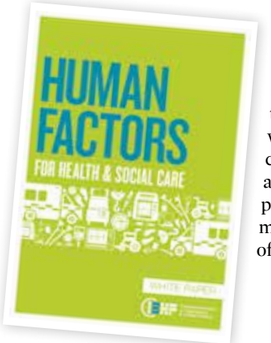
RCSEd Scottish Clinical Leadership Fellow 2017-2018

Find the CIEHF white paper at bit.ly/ergonomics_white_paper



WELLBEING AND PERFORMANCE

Reframing patient safety with the aims of improving wellbeing and system performance is an attractive way to encompass the needs of the patient, provider and system. Patient safety becomes forward-looking and proactive. Developing systems that support people to have happy, healthy working lives through catering for their physical, cognitive, psychological and social needs at work helps deliver a motivated, well-trained and engaged workforce. Having these same people working within robust systems, delivering consistently and striving to improve is the best way to raise performance.

SAFETY AT THE RCSED

The RCSEd is well placed to act as an advocate for patient safety. It has a long tradition of education and training, including NOTSS and the Ward Round Toolkit. It has faculties that capture expertise from different areas of the system, ranging from pre-hospital care, the perioperative team, remote and rural practice, and dental services. Campaigns such as Improving the Working Environment and the ongoing #LetsRemoveIt anti-bullying initiative show our commitment to recognise and act on system-wide issues.

The College has relaunched its Patient Safety Group. This multidisciplinary team draws representatives from all areas of College activity, including patients and members of the wider surgical team. The group aims to formally adopt a human-factors approach to patient safety – systems focused, design led and working to improve wellbeing and performance. We plan to develop a clearer understanding of the patient-safety work already done within the College and to identify areas we can strengthen. By developing clearer strategic oversight of safety activities the College will be well placed to mobilise its resources to meet the patient-safety challenges of the future, wherever they arise.