# Changing Behaviour with a Human Factors Approach

### BY JANE REID, RHONA FLIN AND MARTIN BROMILEY

he Francis Report (2013) identified multiple problems relating to the safety culture of Stafford Hospital in the period 2005 - 2009, as well as serious failings in the supervisory and regulatory systems of the NHS. Particular criticism was directed at the Trust Board and clinical professionals for the culture that developed; notably organisational silence [1], cultural censorship [2], consensual neglect [3] and compassion fatigue [4]; conditions that conspired and failed to safeguard patients. Tolerance of the unacceptable simply became the 'way we do things around here' [5]. In advance of the publication of the report the Foundation Trust Network (FTN) published a letter acknowledging that Mid Staffordshire was not an isolated case and sub optimal care and poor professional standards could be found elsewhere in the NHS; adding it was likely that every organisation probably had a pocket of Mid Staffordshire somewhere [6]. Notwithstanding the significant failures of Mid Staffordshire, an equally significant challenge concerns the scale of variation in the NHS in terms of patient quality and clinical outcome and the pervasive and insidious acceptance of the unacceptable.

In terms of surgical safety we know that routine violation migration

"Individuals undergoing any ENT procedure deserve a quality experience, free of avoidable harm."

......

of essential standards of swab, needle and instrument control, poor communication and teamwork, failure to engage in pre list safety briefings, use of the surgical safety checklist and essential safeguards of read back techniques in situations of laterality contribute to the incidence of surgical 'never' events in ENT [7].

To the detriment of patient care and public confidence, safety culture in healthcare is too often noted when lacking, rather than celebrated and embraced as an enduring value, prioritised by all staff - from the board to the ENT ward, theatre and outpatients department. If the NHS aspires to high reliability, then building and sustaining a safety culture will be an essential part of that endeavour. In a safe culture. system leaders are sensitive to the unintended consequences of policy, and staff at every level share responsibility for safety; acting to preserve, enhance and communicate safety concerns; striving to actively learn, adapt and modify behaviour that enhances both patient and worker safety [8].

Improvement starts by examining current behaviour patterns and identifying what needs to change. The airline industry did so 30 years ago, following a series of accidents that could not be attributed to technical failures, or deficiencies in technical skill. It was recognised that certain behaviours were required on the flight deck to preserve safety. These related to decision making, situation awareness, communication, teamwork and leadership [9]; behaviours that are equally essential to keeping patients safe [10].

There are three lessons from the aviation example that are relevant post Francis. The first is the need to fully analyse accidents to include an examination of 'human factors issues' – especially workplace behaviours. Second is the importance of linking

the findings from these analyses to ongoing training of the behaviours that constitute the non-technical skills in healthcare. Finally, there is a need to appreciate that humans will always be prone to fail in systems that have not been designed using ergonomics / human factors principles.

These interventions have been the main focus of an NHS expert panel, established by NHS Medical Director Sir Bruce Keogh in 2010 and chaired by Sir Stephen Moss, former Chair of Stafford Hospital. Comprising clinicians and human factors specialists, the Department of Health (DH) Human Factors Reference Group is partly drawn from the Clinical Human Factors Group (www.chfg.org), established by airline pilot Martin Bromiley, following an independent inquiry into his first wife's death, which revealed the importance of non-technical skills in healthcare.

The Human Factors Reference Group submitted an interim report [11] to the DH in April 2012, and its recommendations have considerable significance for the response to Francis, not least the need to build clinical human factors' expertise in the UK to address these issues. There is no specialist Human Factors group within the NHS, in contrast to every other safety-critical industry, where human factors inspectors, human factors committees and human factors courses are now found.

There are now sources of healthcare human factors' expertise in the UK. The Clinical Human Factors Group, which is an independent campaign group, continues to play a key role in raising awareness and promoting the role of human factors in safe practice. The professional body in the UK, the Institute of Ergonomics and Human Factors (www.ergonomics.org.uk/) is building representation from within the

healthcare sector and providing a truly systematic approach to the design of safer socio-technical workplaces [12].

Amongst 290 Francis report recommendations, there is no explicit mention of human factors but it is certainly an interventional approach that will be required if the cases of diseased safety culture within the NHS are to be treated.

Individuals undergoing any ENT procedure deserve a quality experience, free of avoidable harm. Whilst so much is focussed on research, surgical advance and technical innovation, for the sake of our patients we need to pay greater attention to the frailties of the human condition, the toxicity of negative behaviours and the design of safer clinical systems, if we are to realise safer care.

#### References

- Morrison E, Milliken F. Organizational silence: A barrier to change and development in a pluralistic world. Acad Manage Rev 2001;25(4):706-25.
- Hart E. Hazelgrove J. Understanding the organizational context for adverse events in the health services: The role of cultural censorship. Qual Health Care 2001;10:257-62.
- Weick K. The reduction of medical errors through mindful interdependence. In Rosenthal M, Sutcliffe K (Editors), Medical Error: What Do We Know? What Do We Do? San Francisco, Jossev-Bass: 2002:
- 4. Sabo B. Compassion fatigue and nursing work: Can we accurately capture the consequences of caring work? International Journal of Nursing Practice 2006:12(3):136-42.
- 5. Deal T, Kennedy A. Corporate Cultures. Reading, Addison-Wesley; 1982.
- Foundation Trust Network. Quality of Patient Care Letter. Available at http://www. foundationtrustnetwork.org/resource-library/ quality-of-patient-care-letter/; 2013, (last accessed November 2013).
- 7. Department of Health, The Never Events Policy Framework: An Update. Available at https://www. gov.uk/government/uploads/system/ uploads/ attachment\_data/file/213046/never-eventspolicy-framework-update-to-policy.pdf; 2012 (last accessed November 2013).

- Agnew C, Flin R, Mearns K. Patient safety climate and worker safety behaviours in acute hospitals in Scotland. J Safety Res 2013;45:95-101.
- Kanki B, Helmreich J, Anca J (Editors). Crew Resource Management 2nd edn. San Diego, Academic Press; 2010.
- 10. Flin R, Mitchell L (Editors). Safer Surgery: Analysing Behaviour in the Operating Theatre. Aldershot, Ashgate: 2008
- 11. Human Factors Reference Group. Report available at / www.chfg.org/news-blog/dh-human-factorsgroup-interim-report-and-recommendations-for-
- 12. Buckle P. Systems approaches to risk assessing healthcare, how far have we come? Work 2012;41:3847-9.



Declaration of Competing Interests None declared.

#### Jane Reid,

RN, DPNS BSc(Hons), PGCEA, MSc. Researcher, Queen Mary University of London; Independent Advisor, Non Executive NHS Trust,



Competing

None declared.

Interests

# Rhona Flin,

Industrial Psychology Research Centre, University of Aberdeen, King's College, Old Aberdeen AR24 3UR. UK.



Competing Interests

## Martin Bromiley,

Chair, Clinical Human Factors Group, Husband of the late Elaine Bromiley, Airline Transport Pilots Licence.