

## Health and safety: effecting a cultural change?

Authors: 'Prospector'

### ABSTRACT

The report of the Future Hospital Commission (FHC) of the Royal College of Physicians acknowledges that the principal challenge for health care organisations and professionals responsible for delivering medical services is to at all times accept the fundamental requirement that patients must be treated with compassion, kindness and respect while having their physical and emotional needs met. The recognition that clinical outcomes alone are an insufficient guide to the adequacy of health service provision demands cultural, organisational and individual change. In the Forum of the *Future Hospital Journal* we will try to scan the world literature for papers that can cast light upon the systems of care that might best ensure these principles are delivered, wherever they have been developed, and to critically evaluate their potential impact. The theme in this edition is patient safety.

'Do no harm' – Hippocrates

'Not failure, but low aim, is crime' – James Russell Lowell

In the satirical novel *The House of God* by Samuel Schlemm, once required reading for novice house officers, one of the protagonists maintains that the Second Law of hospital medicine is that elderly patients 'go to ground' [fall], while the Thirteenth Law states that harm can be avoided by practicing less medicine (doing 'as much nothing as possible'). While the second assertion may be moot, the Second Law unfortunately still holds true.<sup>1,2</sup> In this column, *Prospector* reviews some recent publications and reference materials which describe problems in patient safety and some which offer solutions.

Although the avoidance of harm was first required by Hippocrates more than 2000 years ago, the codification of patient safety as a separate discipline within medicine began in the last decade of the 20th century. It was recognised that tens or even hundreds of thousands of preventable injuries and moreover deaths were occurring among patients receiving medical care. *An organisation with a memory*<sup>3</sup> and its US equivalent *To Err is Human: Building a Safer Health System*<sup>4</sup> were both published in 2000 and, along with subsequent programmes,<sup>5,6</sup> offered guidance to clinicians and encouraged the adoption of patient safety monitoring as an essential part of their care. Particularly ambitious was the Patient Safety First initiative (2008–2010; [www.patientsafetyfirst.nhs.uk](http://www.patientsafetyfirst.nhs.uk)), which shared the vision of an NHS with no avoidable death and no avoidable harm. By contrast, recent data suggest that the incidence of adverse events remains high.<sup>7,8</sup> Of particular

concern for physicians in the UK, of the eight core services investigated by the Care Quality Commission (CQC), the medical care service is more frequently rated as requiring improvement in safety than in any of the others.<sup>9</sup>

A recent paper by Donaldson *et al* is required reading for all working in the Future Hospital for the insight it gives into the current state of patient safety in England.<sup>10</sup> The paper discusses the limited utility of comparative indices when attempting to establish and summarise avoidable factors in the cause of deaths. The authors comment that if a hospital is not an outlier for deaths, its management may assume that nothing further needs to be done. Alternatively, since the stakes for chief executive officers are so high, then initial investigation may focus on the validity or otherwise of outlying data rather than identifying the root causes of avoidable harm. As an alternative, the authors have taken the novel approach of counting deaths in acute hospital settings that have been reported as being related to patient safety. By this means, they have been able to 'classify the reported deaths to identify broad areas of service failure capable of being addressed by strengthening clinical policies, procedures, and practices'. The results thus provide an interesting catalogue of reported avoidable death over a 17-month period from June 2010. Of a total of 2010 deaths associated with safety incidents, 35% were related to the mismanagement of deterioration of an acutely ill patient, while 26% were related to a failure to prevent harm, of which a full 10% of the total (206 patients) died following a fall. Other groups of failure were related to deficient checking and oversight, dysfunctional patient flow and equipment-related errors. Samuel Schlemm identified serious injury as a result of falls as problem in 1978, the papers referenced above identify policy initiatives aimed at reducing harm from falls, and yet at least 206 people died in hospital in England following falls over a 17 month period. What do you think about that?

Within *Prospector's* own area of specialisation, intensive care medicine, the recognition that there are few successful therapeutic interventions<sup>11</sup> has perhaps led to the early adoption of patient safety as an important guiding principle. An initiative to reduce central venous catheter (CVC)-related sepsis<sup>12</sup> has been recognised as an exemplar by champions of patient safety, but other bundles guiding early interventions for patients with sepsis<sup>13</sup> and for the avoidance of ventilator-associated pneumonia<sup>14</sup> have also been notable successes. Further, checklists used by surgical teams and in intensive care have also been used to reduce patient harm and are increasingly being adopted. However there is abundant evidence that following

initial periods of utilisation, guideline compliance falls away dramatically, and in that general guidelines are underutilised. In a recent opinion piece Pronovost suggested five steps that might encourage the use of published guidelines and increase their utility.<sup>15</sup> His call for unambiguous and prioritised checklists to be made part of all guidelines and for specific interventions to overcome identified barriers to guideline use are strategies which could be put to immediate effect. However, integrated guidelines covering common comorbidities and full use of information systems and ‘transdisciplinary’ teams to automate and extend guideline use seem further off.

Given the continuing high incidence of adverse events, despite interventions for their reduction, have we reached an impasse where harm can be seen as an emergent phenomenon inherent to modern medical systems, too complex to be neatly solved by the creation of process flow charts? How can we improve?

In his report *Improving the Safety of Patients in England*, rather than targeting specific process interventions, Berwick describes the requirement for a major cultural change involving all participants – leaders, staff, patients and the public – in order to transform the NHS.<sup>16</sup> He notes: ‘In the end, culture will trump rules, standards and control strategies every single time, and achieving a vastly safer NHS will depend far more on major cultural change than on a new regulatory regime.’ Berwick places learning above all else when setting out the steps necessary to achieve a cultural transformation in which we all become responsible for patient safety. At first reading of the report, *Prospector* – newly advanced to a role of team leadership – felt that this championing of learning in lieu of a more detailed blueprint failed to offer specific direction for all of us now tasked with implementing change. However, on reflection he recognises that he has not previously been exposed to training explicitly and solely directed at understanding and improving patient safety, despite all his prior involvement in audit and service development. He therefore now agrees that learning and education at all levels within the NHS is a fundamental first step in creating a safety-led culture devoted to ‘continual improvement’.

The question that arises is, therefore, how should we begin to meet our own educational needs? As is perhaps to be expected, examples are available in work undertaken in the US. Recently the Accreditation Council for Graduate Medical Education (ACGME), the body responsible for supervising the postgraduate curriculum, has developed the Clinical Learning Environment Review (CLER) programme, which seeks to involve trainees from the start of their careers in work that affects patient outcomes.<sup>17,18</sup> Teaching institutions are specifically tasked with developing educational programmes in patient safety, health care quality, transitions in care, supervision, professionalism, and duty hours and fatigue. It is hoped that early training will ‘drive the culture of patient safety and continuous quality improvement’. A similar trainee programme will be required in the UK if we are to inculcate a safety culture at all levels in the Future Hospital. Furthermore, in the paper describing the CLER, the authors note that ‘many faculty are not prepared for or comfortable with teaching and role-modelling quality and safety skills; indeed, this is the rate-limiting step in [the development of] the CLER.’ So where shall we faculty go for our training? Those responsible for CLER advocate the Association of American Medical Colleges

Teaching for Quality programme.<sup>19</sup> However, The Institute for Health Improvement Open School ([www.ihio.org/education/ihioopenschool](http://www.ihio.org/education/ihioopenschool)) is seemingly more comprehensive and accessible to UK physicians and indeed seeks to educate physicians in quality improvement and patient safety with intended global reach. Finally, *Prospector* finds potential disagreement with Berwick when he states that cultural change will be more important than any new regulatory regime. He supposes that no such artificial division was intended, but certainly if leaders, staff, patients and public are all required for cultural change then regulators should also be seen as essential partners in the process. Indeed in recent documentation outlining the CQC’s new inspection model, the authors explicitly state that the commission intend to drive quality improvement rather than merely acting to deal with poor quality care.<sup>20,21</sup> It is possible to apply to become a Clinical and Professional Advisor to CQC inspections. What better way to learn about regulation of hospital safety than to turn yourself from poacher to gamekeeper? See you soon at a hospital near you!

## Epilogue

The subject of this piece was in part suggested to *Prospector* after a chance conversation at his own wedding with an inspector for the Office for Nuclear Regulation, to whom he is now distantly related. During extremely interesting subsequent discussion it is clear that many of the themes discussed above, in particular those dealing with organisational change and leadership, have remarkable parallels within the nuclear industry.<sup>22,23</sup> A single nuclear never event may have terrible consequences for very many people. By comparison, for the very many patients who every year continue to suffer serious adverse events while under the care of medical services, the consequence for the individual may be just as devastating. *Prospector* suggests that those working in the Future Hospital should address patient safety with the same diligence with which we might hope the nuclear industry applies in its own sphere. ■

DANIEL D MELLEY  
*Consultant in adult intensive care*  
 Royal Brompton Hospital, London, UK

## References

- 1 National Patient Safety Agency. *Slips Trips and Falls: Data Update June 2010*. NPSA, 2010. Available online at [www.nrls.npsa.nhs.uk/resources/?EntryId45=74567](http://www.nrls.npsa.nhs.uk/resources/?EntryId45=74567) [Accessed 7 August 2014].
- 2 Healey F, Lowe D, Darowski A, Windsor J, et al. Falls prevention in hospitals and mental health units: an extended evaluation of the FallSafe quality improvement project. *Age Ageing* 2014;43:484–91.
- 3 Kohn LT, Corrigan J, Donaldson MS. *To err is human : building a safer health system*. Washington DC: National Academy Press, 2000.
- 4 Department of Health. *An organisation with a memory. Report of an expert group on learning from adverse events in the NHS*. The Stationery Office, 2000.
- 5 Department of Health. *Safety first: A report for patients, clinicians and healthcare managers*. DoH, 2006.
- 6 National Patient Safety Agency. *Seven Steps to Patient Safety*. NPSA, 2004. Available online at [www.nrls.npsa.nhs.uk/resources/collections/seven-steps-to-patient-safety/](http://www.nrls.npsa.nhs.uk/resources/collections/seven-steps-to-patient-safety/) [Accessed 7 August 2014].
- 7 Shojania KG, Thomas EJ. Trends in adverse events over time: why are we not improving? *BMJ Qual Saf* 2013;22:273–7.

- 8 Wang Y, Eldridge N, Metersky ML, Verzier NR *et al*. National trends in patient safety for four common conditions, 2005–2011. *N Engl J Med* 2014;370:341–51.
- 9 Care Quality Commission. *Close correlation between safety rating and overall rating, says chief inspector of hospitals*. CQC, 2014. Available online at [www.cqc.org.uk/content/close-correlation-between-safety-rating-and-overall-rating-says-chief-inspector-hospitals](http://www.cqc.org.uk/content/close-correlation-between-safety-rating-and-overall-rating-says-chief-inspector-hospitals) [Accessed 7 August 2014].
- 10 Donaldson LJ, Panesar SS, Darzi A. Patient-safety-related hospital deaths in England: thematic analysis of incidents reported to a national database, 2010–2012. *PLoS Med* 2014; 11:e1001667.
- 11 Ospina-Tascon GA, Buchele GL, Vincent JL. Multicenter, randomized, controlled trials evaluating mortality in intensive care: doomed to fail? *Crit Care Med* 2008;36:1311–22.
- 12 Pronovost P, Needham D, Berenholtz S, Sinopoli D *et al*. An intervention to decrease catheter-related bloodstream infections in the ICU. *N Engl J Med* 2006;355:2725–32.
- 13 Levy MM, Dellinger RP, Townsend SR, Linde-Zwirble WT *et al*. The Surviving Sepsis Campaign: results of an international guideline-based performance improvement program targeting severe sepsis. *Crit Care Med* 2010;38:367–74.
- 14 Rello J, Lode H, Cornaglia G, Masterton R *et al*. A European care bundle for prevention of ventilator-associated pneumonia. *Intensive Care Med* 2010;36:773–80.
- 15 Pronovost PJ. Enhancing physicians' use of clinical guidelines. *JAMA* 2013;310:2501–2.
- 16 Berwick D. *A promise to learn – a commitment to act. Improving the safety of patients in England*. Department of Health, 2013. Available online at [www.gov.uk/government/publications/berwick-review-into-patient-safety](http://www.gov.uk/government/publications/berwick-review-into-patient-safety) [Accessed 7 August 2014].
- 17 Weiss KB, Wagner R, Nasca TJ. Development, testing, and Implementation of the ACGME Clinical Learning Environment Review (CLER) Program. *J Grad Med Educ* 2012;4:396–8.
- 18 Myers JS, Nash DB. Graduate medical education's new focus on resident engagement in quality and safety: will it transform the culture of teaching hospitals? *Acad Med* 2014, in press.
- 19 Association of American Medical Colleges. *Teaching for quality: integrating quality improvement and patient safety across the continuum of medical education*. AAMC, 2013.
- 20 Walshe K, Phipps D. *Developing a strategic framework to guide the Care Quality Commission's programme of evaluation*. London: CQC, 2013.
- 21 Addicott R, Walshe K, Boyd A, Robertson R, *et al*. *Evaluating the Care Quality Commission's acute hospital regulatory model: final report*. CQC, 2014. Available online at <http://www.cqc.org.uk/content/evaluation-helps-hospital-inspection-development> [Accessed 7 August 2014].
- 22 van Wijk LGA, Taylor RH, May JHM, Carhart NJ. A study of the precursors leading to 'organisational' accidents in complex industrial settings. *Process Safety and Environmental Protection* 2014, in press.
- 23 Office for Nuclear Regulation. *Safety Assessment Principles for Nuclear Facilities - Fundamental Principles*. ONR, 2006. Available online at [www.onr.org.uk/saps/saps2006.pdf](http://www.onr.org.uk/saps/saps2006.pdf) [Accessed 7 August 2014].

## Join the discussion online



[www.linkedin.com/company/royal-college-of-physicians](http://www.linkedin.com/company/royal-college-of-physicians)  
[www.twitter.com/rcplondon](http://www.twitter.com/rcplondon)  
[www.youtube.com/rcponline](http://www.youtube.com/rcponline)  
[www.facebook.com/royalcollegeofphysicians](http://www.facebook.com/royalcollegeofphysicians)



Follow us!