Highlights from this issue

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The articles in this issue are about error. Error was rarely discussed "out loud" in the medical journals until the Institute of Medicine (IOM) in the US published its 1999 report "To err is human" documenting the many lives that were lost as a result of errors in the delivery of health care.[1] Even today, physicians find it hard to talk about their errors, not simply because of the fear of a lawsuit, but out of embarrassment and their sense of personal failure. In the years since the IOM report, we've seen much more in the news, the peer-reviewed literature and from the leadership of our institutions about avoiding errors, much of it couched under kinder terms, such as safety and quality. To avoid laying blame (which might hinder disclosure of errors), the focus has shifted to how systems of care contribute to a patient sustaining harm. Anyone who has attended a patient safety lecture has been entertained by Reason's diagram of all the holes in the swiss cheese lining up.[2]

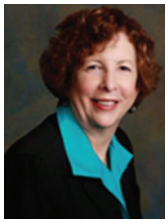
But to face facts, physicians do make errors. And while it is important to engineer the delivery system so that the errors can be caught (and sometimes prevented), we also need to understand how our own thinking processes lead us to make errors in the first place. For this reason, our issue on error begins with an insightful commentary by Pat Croskerry, an emergency physician and psychologist who is an internationally recognised expert on patient safety and diagnostic errors. Cognitive bias, he explains, is lurking behind every patient interaction to potentially trip us up. Finding ways to recognise—and mitigate—that cognitive bias is essential to improving our ability to make good diagnostic decisions.

We then present two 'studies in scarlet,' so to speak: investigations of the types of diagnostic errors physicians make. Okafor and colleagues analysed 509 incidents voluntarily reported by physicians and found that 209 were related to diagnostic errors. They classified the errors as cognitive, system related or unremediable; while system factors were found in 34% of cases, cognitive errors were more frequent, occurring in 41% of cases. Medford-Davis and colleagues reviewed the charts of 100 adult ED patients presenting with abdominal pain who were discharged, or who returned within the next 10 days and were hospitalised. 35 of the patients had diagnostic errors, with about ½ of these considered to have the potential for serious harm. Most of the errors could be classified as due to failure to obtain an appropriate history or physical, not ordering appropriate tests, and failure to follow up on the tests.

In a third report by Broder and colleagues, you will undoubtedly identify with the young emergency physician who finds himself in the middle of a procedure with an unfamiliar piece of equipment, and continues the procedure, with a resulting complication. The paper dissects many contributors to error: perceived time constraints, lack of experience, lack of control over the environment (such as equipment choices) over-confidence, and non-intuitively designed and marked devices. This paper, which might rightly be titled "anatomy of an error" also demonstrates what measures can be taken to prevent this from happening again.

Looking at our errors is one way to avoid them in the future. Additionally, we need, as Dr Croskerry writes, to devise strategies to mitigate our cognitive bias. One of these is to improve the accuracy and details of our history and physical examination, as greater understanding of the problem can prompt a wider differential. I would argue this is particularly important for our younger physicians, who have not encountered the breadth of disease or its many manifestations, and who may be too quick to jump to an investigation to answer the question. Two papers in this issue address workplace strategies to avoid errors for cases that may be particularly challenging. Haworth *et al* created a proforma for the documentation of the exam in patients with facial injuries, resulting in much more detailed description of injuries. Marsh *et al* took advantage of the imprinting of childhood games by adapting "Rock, Paper Scissors" (in Brooklyn NY it was "rock, paper, scissors, match, actually) to "Rock, Paper, Scissor, OK", creating an aide memoire for examining nerve function in children with upper extremity injuries.

What about pre-hospital care? Patterson and colleagues, who previously published a study in the *EMJ* about teammate familiarity in the ED, provide a study demonstrating workplace injuries are far more frequent (100 fold) for paramedics who worked one shift together compared with those who work 10 or more together in a two-year period. Murphy and colleagues describe the development of key performance indicators for prehospital care, going far beyond the traditional focus on response time. While conducted in Ireland, the results of this study have universal application. This month's View from Here describes a stabbing case in which the victim received suboptimal care—and how they have used this event to make major improvements.



Finally, we present a provocative idea that may allow physicians to acknowledge uncertainty. In our first "Concepts" paper, Whyte and Vincent remind us of the concept of measurement uncertainty (MU) which gives a range of the possible values of the test, rather than single figure. The authors argue that by reporting MU clinicians would need to rely on their clinical impression (based on history and physical) to interpret the result, thereby restoring the power of clinical observation expounded by Sir William Osler.

Given all these articles on error and how we might prevent it, you might wonder how safe emergency medicine is. Ramlakhan and colleagues review the many potential hazards we face, and the data on how they impact patient safety. Surprisingly, they conclude that "when compared with other clinical areas or specialties, the ED is not particularly unsafe." Perhaps its because, as this issue shows, we are willing to think about thinking, acknowledge our errors, and are continually working to mitigate against the threats we face, even if in the end, we are only human.

Provenance and peer review Commissioned; Not peer reviewed.

REFERENCES

1 Kohn LT, Corrigan J, Donaldson MS. To err is human: Building a safer health system. Washington, D.C: National Academy Press:2000; USA.
2 Reason J. Human Error. Cambridge: University Press, Cambridge:1990; UK.