Layers of complexity

Sometimes it seems that the more we know, and the more we try to refine our approach to medicine, the more difficult it becomes to evaluate our progress, make informed decisions and plan into the future. To borrow a phrase from Moynihan (page 319), every change, innovation or new piece of information is bound to add a “layer of complexity”.

For example, the MyHospitals website (http://www.myhospitals.gov.au), launched in late 2010, was supposed to enable patients to compare performance indicators for hospitals in their local area, including emergency department (ED) waiting times. But hospitals, and especially EDs, are complex systems. Greene and Hall (page 345) analysed a year of data for 158 EDs on the site, finding that those with a higher proportion of patients within the most urgent triage categories had poorer waiting time performance. In short, performance measures favoured departments that saw fewer urgent patients. The researchers suggested that performance measures for public reporting need to take into account at least some of the complexity, such as ED casemix.

Randomised controlled trials provide robust information about a medicine’s effectiveness but, as Banks and Pearson point out (page 313), looking at safety is more complex because many adverse events only emerge after the drugs have been in general use for some time. For this reason, they propose a life-cycle of ongoing evaluation in which collection and analysis of data continue while a medication is in use. They also suggest that this uncertainty about the safety of newly released drugs be communicated to consumers to engage them in the cycle of evaluation.

Communicating complex concepts to the public is not something we always do well, as Wilson and colleagues remind us (page 324). Over almost 7 years, they assessed 113 media reports about screening tests and 72 about diagnostic tests on their Media Doctor website (http://www.mediacourse). Quality was generally low, with only about a third of reports discussing the evidence behind the test’s claims, and fewer looking at accuracy, potential harms and costs. The authors give some tips for improvement but, for those who want to make serious efforts in this regard, the National Institutes of Health Office of Disease Prevention in the United States presents a free annual training opportunity to help develop journalists’ and editors’ abilities to evaluate and report on medical research for the public (http://prevention.nih.gov/mediacourse).

A concerning report in this issue indicates that high rates of workplace aggression may be adding yet another layer of complexity to the practice of medicine for many doctors. As part of the Medicine in Australia: Balancing Employment and Life survey, Hills and colleagues (page 336) surveyed 9951 doctors, including specialists, hospital non-specialists, specialists in training, and general practitioners and GP registrars. Overall, seven in 10 reported experiencing verbal or written aggression from patients, relatives or carers, co-workers or others in the previous 12 months, and nearly one in three reported experiencing physical aggression. The risks were greater for younger, more junior and female hospital-based clinicians, and for international medical graduates in general practice.

At first glance, our cover image of mothers and their children in a paediatric ward of a hospital in a developing country sits in contrast to the complexity of medicine in a developed country such as Australia. United Kingdom medical student, James Smith (page 351), wrote his story of a child’s needless death in this very ward, while on elective in Central Africa. It’s the winning entry in the student category of the inaugural MJA, MDA National, Nossal Global Health Prize. Individual tragedies such as this, Smith writes, occur in a complex context of chronic underresourcing, ignorance, destructive politics and international inertia. It’s a stark reminder that our own layers of complexity are born of relative socioeconomic advantage and that refining health care is but one part of the human quest for health and wholeness.

Centre of care

In Career Overview (page C1) in this issue, we profile the work of breast physicians, a small but passionate subspecialty in Australia who have found their niche within breast cancer multidisciplinary teams, but are struggling to gain the professional recognition they need to grow their profession. In Medical Mentor (page C5) Dr Sue Fraser, president of the Australasian Society of Breast Physicians, explains why she looks forward to work every day. In our Road Less Travelled article (page C6), surgeon Dr Kingsley Faulkner explains his passion for preventive medicine and health advocacy, particularly through his role as chairman of Doctors for the Environment Australia. Income protection insurance is the focus of Money and Practice (page C7), which explains key points in choosing a policy that suits your needs.