

repeated errors, is not unique. Lee<sup>2</sup> writes as follows: "Suppose a low-risk patient has an abnormal lung ventilation-perfusion scan. Obtaining that same test result over and over will not truly raise that patient's probability of coronary disease further and further."

Perhaps Goldman<sup>3</sup> had something similar in mind when writing, "It may

#### Graham H White

Chief Clinical Biochemist, SouthPath, Flinders Medical Centre, Bedford Park, SA 5042  
graham.white@fmc.sa.gov.au

*IN REPLY:* Many factors potentially contribute to error in generating a diagnostic test result, and include random pre-

---

## eTG complete

#### Ken J Harvey

Board Member, Senior Lecturer, School of Public Health, La Trobe University, Bundoora, VIC 3086.  
k.harvey@latrobe.edu.au

**TO THE EDITOR:** In reviewing the CD-ROM containing an integrated set of *Therapeutic guidelines (eTG complete)*,<sup>1</sup> Mann noted that, although utility was improved, the cost was high (\$220 for a first user, and \$110 for each subsequent user, compared with \$264 for a set of the printed volumes which could be shared within a practice).<sup>2</sup>

Unfortunately, the cost of distilling evidence-based knowledge is also high, especially for publications that require regular review and update. In addition, there are extra costs involved in electronic conversion (text to HTML), reformatting material to fit computer screens, creating expandable and col-

## Correction

*Re* the article "Water and the environment: a natural resource or a limited luxury?", by Karin Leder, Martha I Sinclair and John J McNeil in the 2/16 December issue of the Journal (*Med J Aust* 2002; 177: 609-613). Due to a software error, the affiliation of the authors was incorrectly given as the National Centre for Epidemiology and Population Health, Australian National University, Acton, ACT. The correct affiliation and contact details are:

#### Department of Epidemiology and Preventive Medicine, Monash University – Central and Eastern Clinical School, Alfred Hospital, Melbourne, VIC.

**Karin Leder**, FRACP, MPH, DTHM, Head of Infectious Disease Epidemiology; **Martha I Sinclair**, PhD, Senior Research Fellow; **John J McNeil**, FRACP, PHD, FAFPHM, Head of Department.

Reprints will not be available from the authors. Correspondence: Dr Karin Leder, Department of Epidemiology and Preventive Medicine, Monash University – Central and Eastern Clinical School, Alfred Hospital, Commercial Road, Melbourne, VIC 3004. karin.leder@med.monash.edu.au □

lapsible tables of contents (JavaScript) and searchable indexes. There is also a need to ensure that the electronic version works with a range of common operating systems (Windows, Macintosh and Linux) and with varied and ever-changing web browsers (eg, Netscape and Internet Explorer). In short, producing electronic versions of print publications requires additional resources, stringent quality control and considerable pre-release testing.

In the near future, guideline producers face an additional technological challenge: the need to move from “static” HTML-tagged documents to “active” XML-tagged documents, in which the data elements and underlying logic are machine-readable and thus capable of interacting with the health worker and the emerging electronic medical record (computerised decision support).

These developments (and Mann's concerns) raise the question as to who should pay for best-practice guidelines, including the evolving electronic conversion. Currently, the Australian government appears to lack a coherent approach to the provision of health information, at least with respect to best-practice clinical guidelines. For example, the Federal Government currently funds revision, production and distribution of *The Australian immunisation handbook*<sup>3</sup> and the *Manual of use and interpretation of pathology tests*.<sup>4</sup> More recently, the government has commendably funded a national subscription to the Cochrane Library. However, the government does not fund other equally valuable resources, such as the *Australian medicines handbook*<sup>5</sup> or *Therapeutic guidelines*.<sup>1</sup> The latter survive solely on a user-pays market model.

It can be argued that it is time that the government adopted a more even-handed approach to stimulate the uptake of national best-practice guidelines and related services, perhaps by reimbursing health workers who subscribed to such services with practice incentive payments. This would lower the cost of practitioners acquiring national information resources, preserve the market model and assist guideline producers to meet the ongoing challenges of electronic conversion by improving their income stream.

**Competing interests:** KJH is a (non-remunerated) Board member of *Therapeutic Guidelines Limited*.

1. eTG complete [CD-ROM]. Melbourne: Therapeutic Guidelines Limited, 2002.
2. Mann L. A smorgasbord of guidelines [book review]. *Med J Aust* 2002; 177: 321.
3. National Health and Medical Research Council. The Australian immunisation handbook. 7th ed. Canberra: AGPS, 2000.
4. The Royal College of Pathologists of Australasia. Manual of use and interpretation of pathology tests. 3rd ed. Sydney: The College, 2001.
5. Australian medicines handbook. 3rd ed. Adelaide: Australian Medicines Handbook Inc, 2002. □

## Ross River virus — are we wasting money doing tests?

**Ian R Cheong**

General Practitioner and Health Informatics Consultant, Springwood Group General Practice, 71 Springwood Rd, Springwood, QLD 4127. [ian.cheong@acm.org](mailto:ian.cheong@acm.org)

**TO THE EDITOR:** I was pleased to read the article on Ross River virus (RRV) disease by Mylonas and colleagues,<sup>1</sup> because it included information on the cost of the disease. This makes it much easier to do something practical from a government and health economics perspective about the problem of RRV. The cost of \$1018 per patient, including costs of negative tests looking for cases, sums to a total estimated cost to the nation of \$5 million per annum (based on the reported average of 5000 cases per year in the study by Harley and colleagues<sup>2</sup>). Of note, \$567 was spent per patient on diagnostic tests (56% of the total cost per patient), while the authors noted that in many cases the condition was self-limiting.

I begin to wonder what is the use of spending \$567 per patient diagnosed to prove a largely self-limiting condition that is treated symptomatically? Banning RRV testing could save \$2.8 million per annum, which would be immediately available for mosquito control measures, and perhaps vaccine research, to reduce the burden of RRV disease. We could model the impact of a vaccination program — vaccine development cost, vaccine unit production cost, vaccine delivery, population target, and savings in disease prevented — to determine whether funding of vaccine research is worthwhile.

The point is that without economic data we cannot make sensible “evidence-based” clinical management decisions. We are trapped in a scientific

paradigm, and the health system implements unpopular cost-control interventions because it needs to control spiralling costs. We clinicians need to do better.

If other researchers would follow the lead of Mylonas and colleagues and explore the economics of their subject, we would be able to make more rational choices about healthcare. It is up to clinicians to understand the economic agenda and suggest interventions that make both economic and clinical sense. We can then begin to make more efficient and rational use of our health dollars, relieving stress on a stressed system.

1. Mylonas AD, Brown AM, Carthew TL, et al. Natural history of Ross River virus-induced epidemic polyarthritides. *Med J Aust* 2002; 177: 356-361.
2. Harley D, Bossingham D, Purdie DM, et al. Ross River virus disease in tropical Queensland: evolution of rheumatic manifestations in an inception cohort followed for six months. *Med J Aust* 2002; 177: 352-355. □

## Itching bites may limit Ross River virus infection

**Michael Sorokin**

General Practitioner, The Travel Doctor, TMVC, Adelaide, SA, 27-29 Gilbert Place, Adelaide SA 5000. [michael.sorokin@traveldoctor.com.au](mailto:michael.sorokin@traveldoctor.com.au)

**TO THE EDITOR:** Dugdale proposed recently in the Journal that people who have a skin reaction to mosquito bites are less likely to be infected by Ross River virus than those who do not.<sup>1</sup> As he quotes Kumar, who made a similar comment about malaria infection,<sup>2</sup> one could presumably extend his idea to other conditions transmitted by mosquitoes. This accords with my own personal experience of dengue fever acquired in Fiji.

While serving there, I had two separate proven infections with dengue virus. As I react very little to mosquito bites, I could not identify the time of infection. Indeed, on the first occasion, I had just returned from a three-month stay in Adelaide and could not recall being bitten by a mosquito at all. In contrast, my wife, who developed large weals whenever bitten, went through at least three epidemics of dengue without being infected.

My advice to travellers who consult me is that there is an advantage to reacting badly to mosquitoes, as one is then more likely to take anti-mosquito precautions,