



## Responsible use of scarce health resources

A great deal could be done to provide more helpful but costly medical care if the expenditure on wasteful practices was eliminated. This message is reinforced by the findings of three papers and an accompanying editorial in this issue of the *SAMJ*.

The results of a study of the **utilisation of pathology procedures** in the private pathology sector are reported by Carel Pretorius (p. 51). He found that numbers of both test procedures and accounts increased during the period of study. These increases occurred despite a decrease in the number of beneficiaries. The utilisation of individual procedures varied between laboratories, with large differences in the performance of common tests. The very high incidence of ESR per FBC and almost universal creatinine with 'urea and electrolytes' is a cause of concern, and efforts to decrease excessive and inappropriate utilisation of these specific tests have been described elsewhere. Variations observed can partly be explained by factors under the control of the individual laboratories such as the design of the pathology request form, the expanding content of profiles and the reflexing of tests such as reticulocyte counts. Business opportunities arising from a corporate shareholder may also contribute. The submission of ICD10 codes as envisaged will be invaluable for the rational assessment and management of laboratory test utilisation. The most effective way to improve test utilisation is to control the design of the pathology request form. It has been shown that the absence of 'tick boxes' limited profile content and individual requesting of tests, reducing pathology expenditure without compromising patient care. The temptation to increase the number of tests per event will also be removed by removing the episode fee component from each individual National Health Reference Price List (NHRPL) item and substituting it with a single new NHRPL code for an episode fee.

The feasibility and affordability of a targeted **screening programme for abdominal aortic aneurysms (AAAs)** was studied by Rothberg, McLeod, Walters and Veller (p. 58) using data from 6 participating medical schemes. AAA affects between 4% and 8% of males over the age of 65 in a number of countries. Most AAAs are asymptomatic, but a percentage will rupture without warning. Less than 50% of patients with AAAs that rupture will reach hospital alive; emergency surgery in these patients costs more and there is an 8 - 10-fold increase in postoperative mortality risk. International experience has been that screening for AAA reduces morbidity and mortality but at a significant cost. On the basis of their findings the authors conclude that the considerable cost would be unaffordable for most medical schemes in South Africa.

The Medicines and Related Substances Control Amendment Act No. 90 of 1997 (the Act) was designed to enable the government to undertake a variety of actions to provide a supply of more affordable medicines. This included enabling the **generic substitution** of a branded drug. Deroukakis (p. 63) studied the consequences of this by comparing the use of the beta-blocker, Tenormin, with three generics. She concludes that the aims of the Act have been fulfilled. The greatest increase in medical aid claims for generic drugs occurred prematurely, in anticipation of the implementation of the law.

In his editorial Burns (p. 38) notes that there has been a burgeoning increase of various **screening programmes** driven by the logic that prevention is better than cure. These all add substantial costs to a health care system. The cost benefit of most such programmes at a community or public health level has come under increasing scrutiny and most have failed to show convincingly that the positive benefits, in terms of decreased mortality, justify the cost, or harm, of over-investigation, over-diagnosis or over-treatment. Breast screening for cancer for lower-risk patients is controversial, and it is clear that routine screening for cancer of the prostate using the prostate-specific antigen is not cost beneficial.

## Rolling back malaria in Africa

Malaria is a preventable and treatable disease that affects hundreds of millions of people, contributing to a vicious cycle of poverty and causing over 1 million deaths each year, with the biggest toll in sub-Saharan Africa. The high HIV prevalence in sub-Saharan Africa exacerbates human resource constraints by increasing the patient caseload while decreasing the workforce.

An African success story of combating malaria in Eritrea is provided in the study by Mufunda *et al.* (p. 46), and in her editorial (p. 36) Karen Barnes enlarges on this theme. A range of effective tools is available to achieve ambitious goals of reducing mortality due to malaria. Both indoor residual insecticide spraying and insecticide-treated bednets have been shown to be highly effective for control of the anopheles mosquito vector. Early definitive diagnosis can be made using rapid diagnostic card tests. Artemisinin-based combination therapies are generally considered the current best treatment for uncomplicated falciparum malaria. Mortality from severe malaria is reduced by 34% with intravenous artesunate when compared with intravenous quinine.

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